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CB Action

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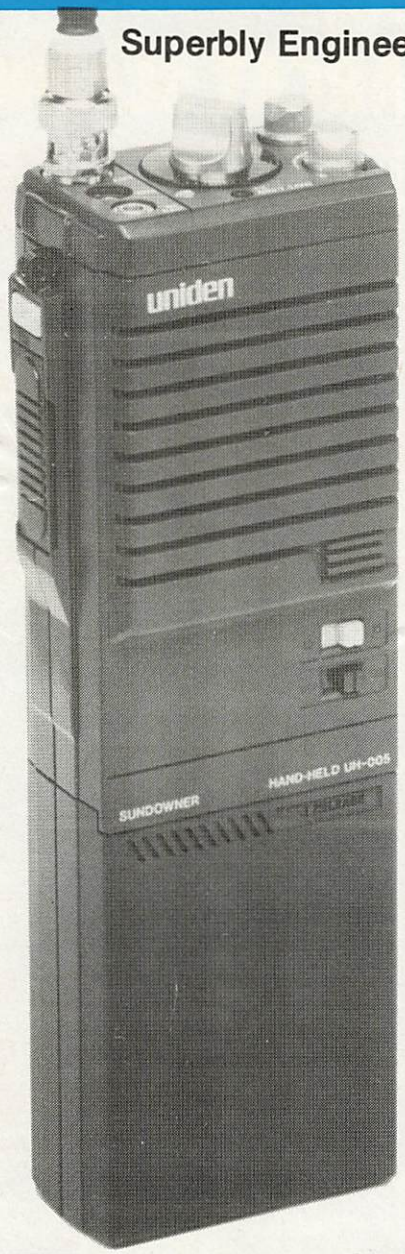

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On Channel

If you are looking for Sydney Scene, or Down South in this issue, you are out of luck. Rob Adams reckons that he is getting no feedback from CBers in South Australia, and couldn't come up with any words. C'mon South Australia — it's your column, and Rob needs some help. Drop him a line to PO Box 42 Modbury North SA 5092.

Sydney Scene seems to have disappeared in the mail somewhere between Steve Griffin and our post office box.

Murphy has been working overtime again ...

★ ★ ★

Our correspondent from the north, Rod Fewster has taken up some of the slack with a tongue in cheek "one off" column "27 Bleg News". As usual, he doesn't pull any punches. While we are on the subject of Fewster, you can love him or hate him, but if you write letters to this office poking it up him, at least have the intestinal fortitude to sign the letter. Unsigned mail goes straight into the WPB.

★ ★ ★

Club News was another casualty this issue. We did receive a few snippets of information which was sent direct to this office. Send your club news to: PO Box 429, Milsons Point, NSW 2061. Applications for inclusion in the club register are to be sent direct to GPO Box 628E, Melbourne 3001 on the official form in each issue.

Alterations, additions and deletions will not be taken over the phone — so save your money.

★ ★ ★

It appears that there is a move afoot in Victoria to ban the use of radar detectors. We won't make any comment on the wisdom of the proposed legislation, but it will be interesting to see how the authorities are going to go about detecting users. It has been reported that lists of owners have been demanded from the radar detector suppliers, and the authorities are going to start from there. An interesting concept, but for the life of me, I can't remember the name of the guy who bought mine ...

Mind you — it will send the price of second hand detectors through the roof, and create a large market for the "concealed" type.

Let's face it, the truckies will fight to death, the same as they did when CB first arrived.

★ ★ ★

You can expect to see a couple of new names on the shelves of your local CB shop. Well, not exactly new, more a resurgence of names from the past. Kraco have re-entered the Australian market, and Cobra are also making a comeback. Both were well respected names, and it will be interesting to see how their new offerings stack up.

★ ★ ★

The necessary machinery has been set in motion to open a yearly subscription list for this publication, but at the time of going to press we were still short of a few details. With any luck you will find a subscription form in the next issue, which will save you a trip to the newsagent every second month.

★ ★ ★

While we are on the subject of subscriptions, it appears that there are no regular magazines on the subject of CB in the USA. This publication was mentioned in a newsletter which is circulated in the States, and as a result, your scribe has spent a great deal of time answering mail from interested CBers Stateside. Maybe it's time the Boss sent someone over there to investigate the market ...

We have asked several of the CBers who wrote to us if they could send some details regarding the current situation in the States on a regular basis, but have not had any takers to date. There have also been a number of potential advertisers interested in taking space, so things are really looking up!

★ ★ ★

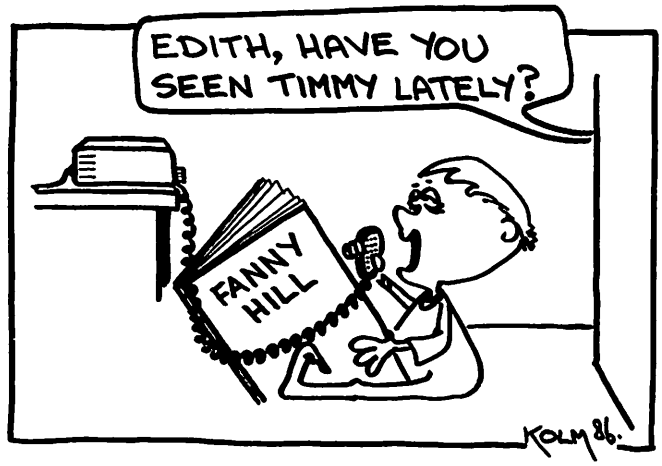
The first selcall module for a handheld is now available from Icom. Naturally the unit is designed to fit the IC-40, and you may remember that when we reviewed this unit, we commented that there appeared to have been allowances made for the inclusion of such a device in the future. The selcall unit is compatible with those used by Philips, Standard communications, and other common UHF rigs. See the details in the New Gear pages.

★ ★ ★

More on the subject of handhelds.

By the time this issue hits the news stands, the Uniden UHF handheld should be available. We haven't seen the unit yet, but should be able to give you some details in the next issue.

Meet our new CBA cartoonist — John Kolm. John's cartoons will be appearing regularly from now on.



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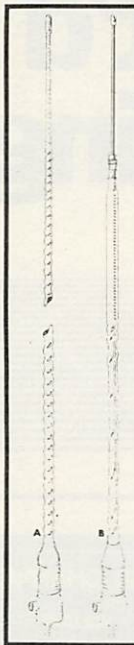
MOBILE ONE — S.A.M.



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PATENT PENDING 1985 — PH2268
DESIGN REG. PENDING — 1644-85

This Heavy Duty Base has been designed to fulfil the requirement for a solid yet light duty mounting assembly to support a wide selection of mobile antennae, that are normally subject to continual abuse as would be found in such applications as on trucks and four wheel drive off-road vehicles.

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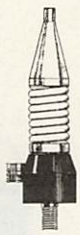
The external mounting bolts, as with the mounting hardware have been plated with a special marine grade nickel-cadmium finish.

Mounting is provided by ⅜" whitworth brass bolts and includes a lock washer, star washer and locking nut, so as to prevent the assembly from coming loose due to vibration and shock.

SUPER SPRING ANTENNAE



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FEATURES

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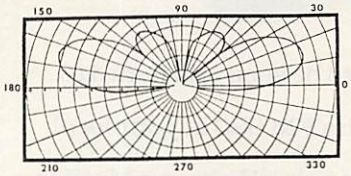


COMPLETE WITH 14m LEAD & 2 x PL259's

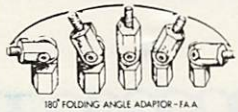
SPECIFICATIONS

TYPE	PHYSICAL ½ WAVE WITH ¾ WAVE FEED
FREQUENCY	26.5 — 29 MHZ
BANDWIDTH	UNDER 1.5:1 OVER 200 KHZ
IMPEDANCE	50 OHMS
POWER RATING	1 KILOWATT MAX.
PATTERN	OMNI DIRECTIONAL VERTICAL

OVER 5000 SOLD

MOBILE ONE — ANTENNA ACCESSORIES

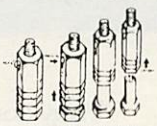
F.A.A.


180° FOLDING ANGLE ADAPTOR - F.A.A.

THE FOLDING ANGLE ADAPTER (F.A.A.) ALLOWS THE ANTENNA TO BE ADJUSTED 180° TO ANY ANGLE THAT MAY BE NEEDED TO ASSUME A VERTICAL POSITION FOR THE BEST RECEIVING AND TRANSMITTING ABILITY.

P.S.O.

THE POP-IN SNAP-OUT FITTING (P.S.O.) HAS BEEN DEVELOPED TO AID IN THE FAST REMOVAL OF MOBILE WHIPS FROM THEIR BASE. JUST SQUEEZE THE BUTTON AND "SNAP", THE ANTENNA IS IN YOUR HAND READY TO BE LOCKED SAFELY AWAY IN YOUR CAR OR TRUCK CABIN. NO MORE TEDIOUS UNSCREWING, JUST SQUEEZE AND "SNAP", IT'S IN YOUR HAND


POP IN - SNAP OUT - PSO

F.S.D.

FOLDING SNAP DOWN - FSD

THE FOLDING SNAP-DOWN (F.S.D.) ALLOWS THE ANTENNA TO BE FOLDED AND SNAPPED DOWN FOR EASY ACCESS THROUGH LOW CLEARANCE AREAS.

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SSB/PCS 186

LOG BOOK

AM TO BE BANNED?

A recent but well-sourced rumour indicates that the DOC is giving consideration to a plan to scrap the AM mode from 27 MHz by 1993.

This would surely be as ridiculous an idea as their 1977 plan to ban all 27 MHz CB as of 1982!

SOUND ADVICE FROM HATADI

Hatadi's 1986-87 'Sound Advisor' catalogue has just been released.

Over the past five years, the Sound Advisor has not only kept Australian CBers up to date with the complete Hatadi Pearce-Simpson range, but also provided information on a broad range of related topics.

This year's Sound Advisor has a new magazine-style format, with 42 pages of details on the full Hatadi line-up — from CB and marine radio, to car sound and home entertainment.

An enlarged information section covers antenna tuning, marine radio, HF/UHF CB and car hi-fi tips.

'Up to 80,000 copies of each issue of the Sound Advisor are distributed throughout Australia' says Hatadi's General Manger John Bishop. 'By showing our full range of products, the buyer can easily choose the item that suits them best.'

'The information section caters for a very broad range of data, for the newcomer, and complements the general product details expected by more experienced buyers.'

The Sound Advisor is available free from your local Hatadi dealer.

FREEBIE!

In these times of escalating prices it's unusual to find something for nothing.

Rod Fewster, the CB Action journalist readers either love or hate, has written a program for the Commodore 64, and he's actually giving it away for free.

Aptly named "VHF/UHF Antenna Design", the program will design a long Yagi to your own parameters for any frequency between 100 MHz and 3000 MHz.

The program is bug-free and extremely user-friendly. You simply type in the required frequency, the number of elements required, and the boom diameter, and the computer does the rest with on-screen prompts.

If you make a design error, like trying to create an antenna four kilometres long for instance, the program tells you so, and how to correct it. (Knowing the Dreaded Fewster as we do we're surprised that he didn't include a routine to make the computer explode and blow your fingers off if you made a boo-boo).

The end result is a printout of all necessary measurements, accurate to within 0.1mm, plus a heap of other useful information.

Rod will provide the program free to anyone who sends him a blank disk and $3 for postage and handling, or on one of his own disks for an additional two bucks. The address is PO Box 29, Kallangur, 4503.

KRACO RETURNS

Back in the "good old days" Kraco was a name to be reckoned with in the CB market. They disappeared from the scene around 1980, but the word is out that they are back.

We haven't much detail at the time of going to press, but we have seen their brochure, which contains information on three rigs — an AM only mini-sized mobile (we have seen this unit in the flesh, and it looks OK); and two portable emergency units, one of which accepts batteries to make it a true portable 40 channel 27 MHz rig.

More on these at a later date.

WORDMAZE WINNER

Congratulations to Mr R. Bailey of Caloundra, Queensland the winner of the CBAction/Creative Electronics wordmaze competition in our last issue. The correct answers to the clues were: Bint Services, Delta Base, Timeplus, Mobile One, Power Band, Echotone, Crazy Charlie, Santronics, Icom, GFS.

Mr Bailey wins a Q300 Whistler Radar detector from Creative Electronics.

NEW WORDMAZE COMPETITION

You will notice that we do not have a wordmaze competition in this issue, due to space limitations. However, we have something bigger and better planned for our next issue. Hang in there — it will be worth it.

BIG EYEBALL

Late news just in should delight Victorian CBers. John Carney of Carneys Discounts has organised a unique "eyeball" to be held at the Lilydale Market Complex, Lot 1 Hutchinson St. Lilydale on Friday 2 January, kicking off at 7pm.

It's certainly an eyeball with a difference!

In conjunction with the police Blue Light Disco, there will be a disco, and dacning, with prizes of Pearce-Simpson CBs and Sterling car stereos being given away every half hour.

The market will be trading until midnight, with service groups in the area providing stalls to raise money for charity — spinning wheels, lucky envelopes, BBQs etcetera.

Everyone is welcome — CBer's, families, and friends. There is a small admission charge, with all proceeds going to the Blue Light organisation, and charity. Security will be organised by the Victorian Police.

Put this event in your calendar for 2 January. CB Action will be there, and will carry a report in our March issue.

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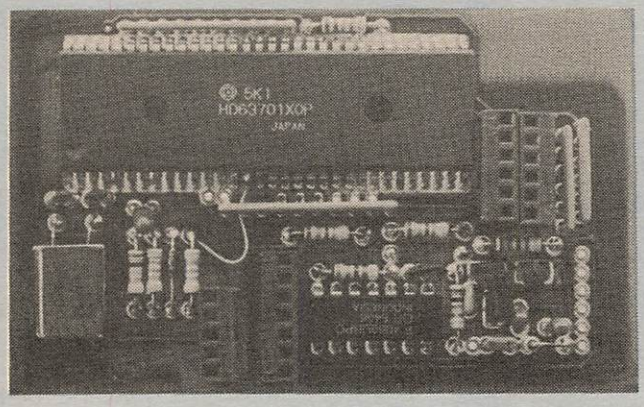

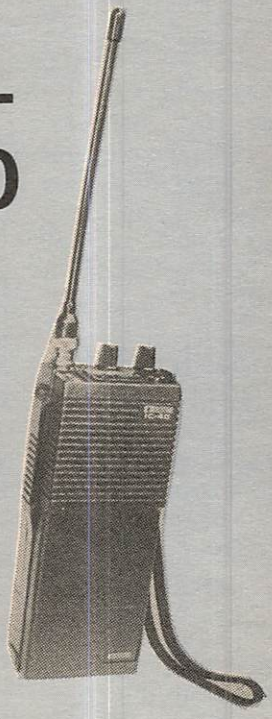

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DOC'S NEW LICENSING SCHEME

BY RICHARD BAILEY

Label licensing is the name for a new plan being considered by the Department of Communications.

In short, it means that every vehicle — car, truck or what-have-you — with a licensed two-way radio must have a special label on the windscreen, like a car rego label.

The Department claims that this will be required for any mobile station — CBer, ham, business, even police and emergency services. It could also be used for marine radios in boats.

Last time they raised the issue with CBers and other radio users, DOC were told in no uncertain terms that it would be a complete waste of time and money. Nothing has changed.

According to the Canberra licensing section, "no introductory date has been decided upon yet for label licensing." It was "still very much in the planning stage" I was told during a phone call to them. "It may not even get off the ground."

So what is the idea behind this "proposal"? The Policy Division claimed it was to "reduce the number of unlicensed radio transceivers, by identifying those complying with the law with a sticker. This will have the effect of publicly identifying unlicensed stations" (those without a sticker, just like a car with an out-of-date rego label).

When you renew your radio licence, you get a new label, for the next 12 months.

Of course, it will cost a fortune just to print these labels, hundreds of thousands of dollars. This is no stab-in-the-dark figure — according to DOC's own figures, there were over 527,000 licences issued in 1985. Over half of these would fall into the label licensing scheme.

And where does the cost of all this come from? Our licence fees, of course. We could probably complain that we get precious little for our money already, without this system biting into it even more. But, just to keep the books in balance, I'd say it would be a fair bet that DOC hikes up licence fees again — "justified" by the cost of introducing and running the scheme.

We might not care too much, if label licensing actually did achieve something — if it **did** result in more licensed stations, and less illegal operations. Although our fees would still remain as high as they were before — if there are more licences, then good luck to DOC, we'll continue to pay as before.

But the point is, just **what** will this scheme achieve? By the Department's own admission, it is meant to identify unlicensed stations.

But who on earth are they being identified to? Who is supposed to walk the streets and check that every car (or boat) with a two-way radio has a label?

Not the RIs, that's for sure. Ask any one of them, they'll tell you that they've got more than enough to do right now, without looking for label-less mobiles.

When this is pointed out to DOC's Policy Division, they reply "the scheme can be policed by radio inspectors and any delegated officer. Under the Radio Communications Act, the Minister has the power of delegation." That is, the ability to appoint or authorize some other person to help do the job.

I have heard many times bfore that DOC were expecting the police to do this. I asked DOC, and — after an embarrassed silence of a few seconds — "The police may or may not be involved"!

Now, the Department can't say that this is only a new proposal, or that they're not trying to get the boys in blue to shoulder the load. The matter was raised and discussed at length during a National Police Conference in Adelaide during August. It was also brought up during a 1985 conference.

The police have even more work on their plates than the RIs! How high a priority will checking for licence labels assume, amongst their other duties — theft, assault, domestics and everything else?

Most police forces are pretty unsure about it all. Even the top brass can see that it's a big and thankless task to add to their list of responsibilities.

But, I'd heard that the WA Police were in favour of it. At least, that's what DOC had been told, but I doubt that the average "cop on the beat" cares for it.

So, I rang the WA Police and spoke to their Officer-In-Charge of Communications, Inspector Watts. He was in no way uncertain as to the status of label licensing, saying that "this system is coming in, although policy and implementation have yet to be decided."

Would the WA Police be involved, I asked? "Well, there are a lot of steps to be pursued," he said, "and we still have to confirm any decisions, and have yet to make up the working parties to consider it."

"We don't want to jump headlong into it," he continued, "it all depends on our budget levels, expenses of the scheme and so on."

He did have an opinion that it was "mostly" for CB radio — the biggest volume is in CB."

Honestly, can anyone see this scheme to be anything but a waste of money and resources? The RIs and the police have better ways to spend their time, and the DOC **must** have better ways to spend **our** money!

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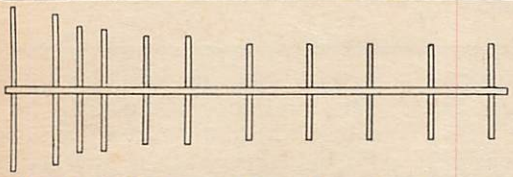

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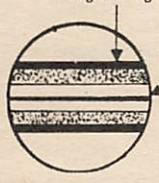

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RIG REPORT

GARDNER SUPER BOOMER AM/SSB

For this issue's rig tests, we have chosen two 27 MHz AM/SSB from different distributors. The Super Boomer is from the Gardner Electronics stable, who distribute through the Crazy Charlie chain. The Super Tomcat Mk11 is from Hatadi Pearce-Simpson.

The Gardner Super Boomer comes garbed in basic black, with a no-nonsence look about it. The control identification is in contrasting white lettering, large enough for even these rheumy old eyes to see at a reasonable distance.

The first thing that struck me was the inclusion of an analogue S/RF meter. During the last couple of years, the trend has been towards electronic meters with colored LEDs, which helps make more space on the front panel of the ever-shrinking modern CB. Personally, I like the analogue meter, but then again, I have been accused of being a bit behind the times . . .

The mike connector is located on the front panel, albeit on the left hand side, but that's a damn side better than a side mounted job. Gardner have taken some trouble to relocate the mike from the side position, as it is evident when you remove the casing that this is where the mike was originally mounted.

The Super Boomer offers a full set of controls – On/Off Volume, combined with the squelch control (concentric pots); RF gain/mike gain (concentric pots); mode selector (LSB/USB/AM): clarifier, and channel selector make up the bottom row of controls. Above these are three two position controls for ANL/OFF; Noise Blanker-/Off, and CB/PA.

Although the controls are a little cramped, this is only to be expected on a mobile rig. I would like to see the outer rings on the concentric controls given a "grippier" surface — they are smooth chromed, and a little hard to turn. The centre knobs are fine, because they are oval shaped.

The LED channel readout is an eye pleasing green, and I must admit that I prefer this color — mainly because I suffer from astigmatism, and green always looks sharper than red, but also green seems to stand out better in bright conditions.

The rear panel of the Super Boomer intrigues me somewhat. There are two apertures near the

top of the panel, and I presume that the left hand one is for ventilation, but the one on the right doesn't seem to have much purpose. Apart from this, the line up is run of the mill — SO239 antenna socket, plus sockets for an external speaker, and a PA speaker. The power socket is quite small, and features positive polarity, plus, the polarity is marked beside the socket.

It is interesting to note that the unit comes out of Japan, whereas the majority of rigs now seem to emanate from either Korea or Taiwan. Mr Gardner must be getting a better exchange rate on the yen than we are!

The mounting hardware is robust, with the bracket being slotted for easy removal and installation of the rig. The wing nuts used to secure the rig are more than somewhat austere, formed from pressed metal with a japanned finished. The mounting bracket is similarly finished. The outer case of the rig fits together nicely, but beware if you

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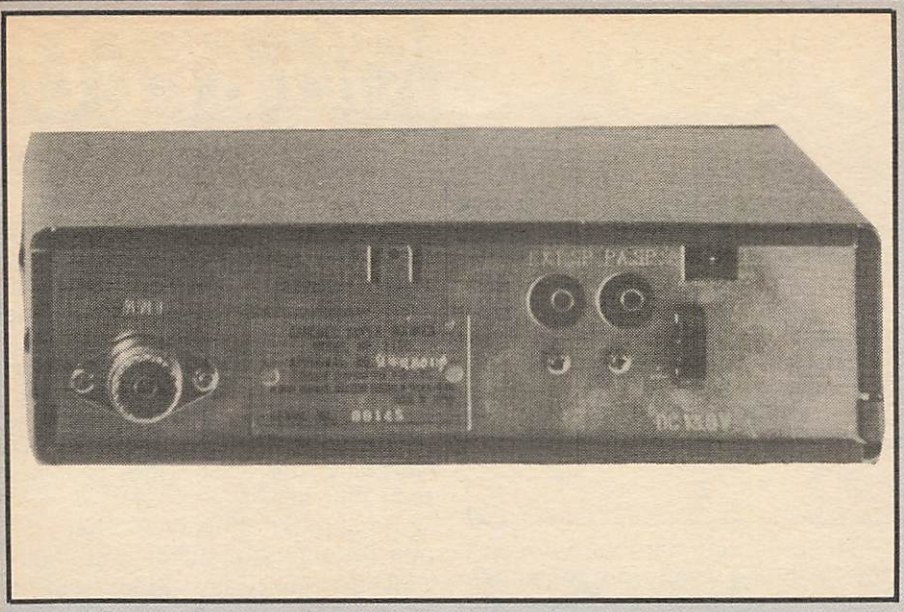


want to put your sticky little fingers inside — the edges of the case, once apart, are quite sharp. Maybe they are designed that way to discourage tampering . . .

There are another two very small holes in the right hand panel which don't seem to serve any purpose either. I'd be loathe to use them to mount the mike hanger, as there are no suitable short self tappers supplied in the nuts n' bolts bag, and if you used a long screw you could conceivably screw it into a component, just like I did with this computer I'm tapping away on. A typical "Fred" manoeuvre . . .

However, once inside the rig I got the feeling of having "been there, done that", but I can't remember when — it just had a familiar look about it. The component layout is fairly busy, but quite nicely set out. Our tech stated that there were easier boards to work on, but this wouldn't trouble the average user — only the techs.

Performancewise, the Super Boomer fell into the "average" department in nearly all departments.

Sensitivity was quite good at 0.5 uV for 12 dB SINAD on AM, and 0.38 uV for 12 dB SINAD on sideband. The recovered audio was easy to listen to, with no distortion at normal listening levels.

Output came within spec at 3 watts and 12 watts, on AM and sideband respectively. Our test station reported the transmitted audio as good, but when the mike gain was turned full on, there was a tendency towards overmodulation. Adjustment of the mike gain cured the problem, and with normal audio input the correct setting appeared to be just over half way.

Adjacent channel rejection was what I would call normal CB standard – not up to commercial specs, but acceptable from a CB point of view.

Frequency accuracy was good on AM and upper sideband, but showed up as 250 cycles high on lower sideband.

The instruction manual is well put together, giving sufficient information for a raw beginner to get on air, and for the technically minded, a circuit diagram is included. There are also a few tips on operational procedure for the beginner.

I think that "middle of the road" would be an apt description of the Super Boomer, and quite good value for the money.

Thanks to Gardner Electronics for supplying the rig for test.

RIG REPORT

PEARCE-SIMPSON SUPER TOMCAT AM/SSB MOBILE

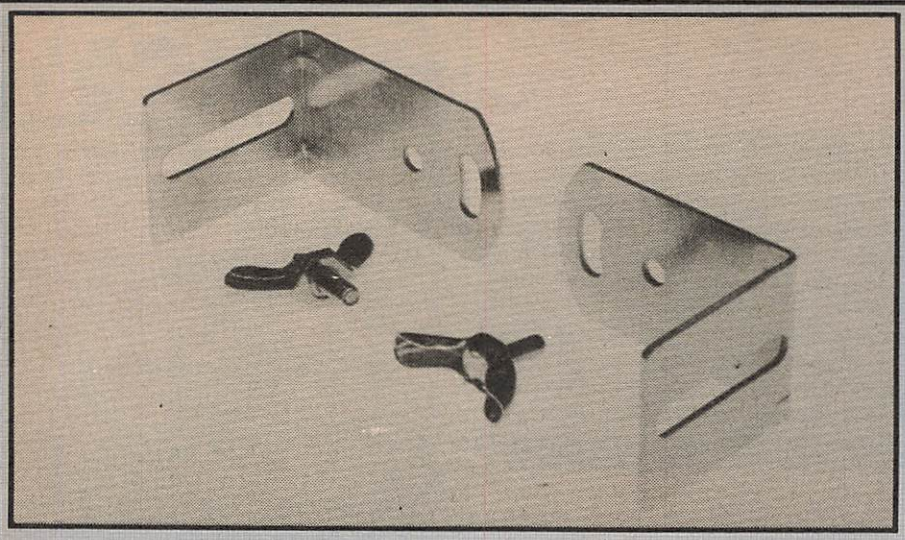
This is Hatadi's latest offering for the AM/SSB market, a field which we haven't covered for quite a while.

The Super Tomcat is well presented in an attractive beige case, with a contrasting front panel. The unit is quite small for a sideband rig, following the modern trend towards "miniaturisation", and as a result the controls on the front panel are a little more cramped than usual. The actual control layout is somewhat different to what we have seen in the past.

On the left hand side of the front panel are a group of three multiposition slide controls. The top control is for the whole select — AM/USB/LSB; lower left selects ANL/NB/OFF; lower right selects CB/PA. I wasn't over impressed with the solidity of these levers — they felt rather sloppy in operation, as they were quite loose.

To the right of this area are four rotary controls — On/Off/Volume; Squelch; Clarifier; and RF Gain. These controls are good and firm, although a tad close together. Between the RF Gain control and the channel selector on the far right, is a small panel containing the LED channel readout, and the RX/TX indicator LEDs.

The S/RF meter is a series of lights above the four rotary controls. Although the LED channel readout is green, which I prefer over red, for a moment I thought that my eyes had gone a bit funny,



as the readout was not sharp. Easy, thought I — there is a piece of protective film covering the LED. And, so there was, but removing the aforesaid film still didn't make the readout any sharper. Obviously, it's designed this way for a reason, but that reason escapes me . .

The microphone socket is not front mounted. In fact it is mounted on the right hand side of the case, especially for us Aussie drivers!

At last!!! Well done Hatadi.

The rear panel also is much different to any we have seen in the past on a humble CB rig in that it is a solid diecast job, very solid with a heat sink on the right hand side. The power cord is a captive affair, which I've got mixed feelings about. It's a pain in the butt having to disconnect the power at the source if you want to take the rig from your vehicle. I'd be installing a joiner close to the fuse holder myself . . .

Between the S0239 antenna socket and the heat sink there are three apertures. The two sockets on the right are self explanatory — one for an external speaker, and the other for a PA horn.

However, the left hand aperture, marked "SWR SET" leaves me a little bewildered. It's simply a hole through the rear panel, and poking a screw driver through it while the rig is switched on could prove expensive! And, I could be wrong — again — but, I thought that to adjust the SWR, one fooled around with that long black thing on the other end of the co-ax, called an antenna.

Even a search of the handbook (always a last resort) yielded nothing in the way of information.

The mounting hardware doesn't get much of a wrap from me either. The bracket consists of two right angled, slotted pieces of metal, and a pair of wing nuts formed from pressed steel. I can remember when the mounting hardware for most rigs were nothing short of works of art, being chromed with fancy knurled heads on the machine screws, and built like a masonry toilet. Ah well, that's progress I guess . . . Mind you, with the way the Aussie dollar is performing against the yen, every saving counts. There isn't a "Made in . . ." label on the Tomcat, but I suspect that it comes out of Taiwan, and the Aussie dollar ain't doin' all that good there either.

Moving right along to the performance of the Tomcat, this rig too could be classed as average from a CB point of view. Frequency accuracy was good on AM and upper side band, and 250 cycles high on lower sideband. Power out was spot on 4 watts AM, and well in excess of 12 watts PEP on sideband. The transmitted audio was reported as good.

Recovered audio was also good, but there was a bit of a surprise in the sensitivity department. Although the unit sounded as though it was quite sensitive, the actual bench test figures did not support this. AM was about average — 0.4 uV for 12dB SINAD, but surprisingly, the SSB figure was higher at 0.78uV for 12dB SINAD. Normally, the SSB figure is lower than that on AM.

Remember however, that the test rig was straight off the shelf.

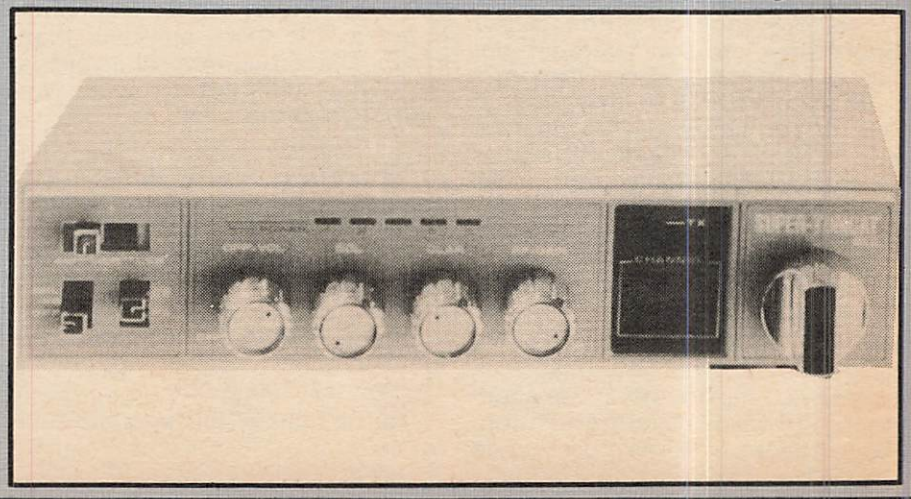
The circuitry is well laid out inside, but once again, our tech made the comment that service-wise it doesn't hold much joy. My feeling is that techs are more than somewhat hard to please — maybe they should spend a couple of hours under the bonnet of my faithful Henry V8 — now that IS hard to work on . . .

The outer casing fits together well, and the color scheme makes the unit quite attractive. Overall, the Super Tomcat MK 11 represents fair value for money — it's recommended retail price is around $269, but from what I have seen around the marketplace, you could probably shave a bit off this.

One thing that can be said for Hatadi Pearce-Simpson — they keep the rigs coming!

It would probably be true to say that we could fill the next three issue rig tests with their gear, and still not catch up.

Thanks to Hatadi Pearce-Simpson for supplying the rig for test.



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NEW BEARCAT SCANNER RANGE

When scanning first became a popular hobby in Australia, the 'Bearcat' brand was among the most favoured. Now, Bearcat is back — with a new range of scanners under the 'Uniden' banner.

Their three models are designed to cover every interest — from the no-frills handheld, to the full-feature base unit. These were graciously supplied for this report by Santronic Agencies, through Sydney's Captain Communications. Armed with a copy of the comprehensive ESG scanner frequency listing, I soon had each unit hopping around the bands.

What do the new Bearcats offer the scanner enthusiast?

BEARCAT 50XL (Portable)

This is the basic scanner — all the essential functions, without any of the trimmings. the 50XL has a good, clean lay-out, and is built from high-impact resistant ABS plastic. Roughly the same size as an IC-40 UHF handheld, it sits very neatly on the belt, and looks good to boot.

The 50XL allows you to store frequencies in 10 memory channels, and scan through these channels (with a 'lock-out' for as many channels as desired). Or monitor them one at a time. And that's it.

But the 50XL doesn't have to be tarted up to attract attention. It is a quality unit, built to a price, and anyone with definite frequencies to monitor — especially volunteer & emergency groups — will find it hard to beat.

The controls are simple. A numeric key-pad, with other buttons for lock-out/review/scan/manual. Atop the unit, volume and squelch knobs, earphone and antenna jacks.

There is also a side-panel socket for the optional AC adaptor.

The 50XL uses a novel single-digit LCD display. When entering a frequency, or checking the contents of a memory channel (using the 'review' button), it reads one digit at a time — eg, '4,6,8,-4,0,0'.

A keypad lock switch is provided, and is much better than the push-button version other portables use. If you're out and about, it is very easy to unwittingly bump the button and 'unlock' the keypad. With every step you take, the scanner is then deftly reprogrammed, or at the very least you are no longer monitoring the frequency you wanted.

A slight trap for the unwary is that the 'keypad' switch is actually opposite to the normal 'keypad lock' function. That is, 'keypad off' is the locked position.

The Bearcat 50XL does have a delay feature, which holds each channel for approximately three seconds after the end of each signal. This is automatic, and cannot be switched off.

The scanning rate itself is fast, covering all 10 channels in less than a second.

Nominally powered by regular ('dry') cells, the 50XL emits a 'beep' tone every 15 seconds when batteries are low. Although the handbook makes no mention of any back-up to retain memory when the cells are taken out and replaced, the programming remains intact during the operation.

One could really only fault the 50XL on two counts.

The lack of a display light is a bit of a bother for portable use at night. I can't see that this feature would cost much more, or make the unit any less an 'economy' model.

The second omission is much more serious, and would be the biggest handicap the 50XL has to face - that it does not cover the Australian VHF low-band (70-88 MHz).

This is most surprising, as both the other Bearcats include this band, at the expense of the little-used 30-50 MHz segment. This is the American VHF-low allocation, which is retained on the 50XL.

Considering the large amounts of traffic on the Oz low-band, especially in regional and country areas, I think life will be somewhat difficult for the 50XL. It is certainly too good a portable scanner to deserve such an obvious weakness.

Apart from that, the Bearcat 50XL is a beaut - straight up-and-down unit, with one or two nice touches. I certainly have never had a programmable scanner that was easier to use, yet performed so well.

Bearcat 50XL

Dimensions — 65w x 170h x 35d (mm), weighs 295g.
Power — 7.5 vdc (5 AA cells, nicads or adaptor)
Frequency range — 29.54 MHz, 136-174 MHz. 406-512 MHz
Channels — 10
Features — lock-out, delay, battery warning, keypad lock
Accessories — belt clip, antenna

BEARCAT 100XL (Portable)

As much as the 50XL is a basic unit, the 100XL aims for the top end of the portable market - and hits the target dead centre. It is a true deluxe handheld, of solid construction (the case is mainly anodized extruded aluminium).

The keypad is well laid out, with all the programming and function keys up front. Other controls — volume, squelch, antenna and earphone sockets — are on top, along with the useful keypad lock switch and an LED battery indicator.

Still, for all the tricks, programming is as easy as with the rest of the range. Enter channel number, press 'manual', enter frequency. Is that foolproof, or what?

With 16-memory channels, frequency coverage of the 100XL is extended from that of the 50XL. Although it loses the 29-54 MHz segment (no great disadvantage),

both the Australian VHF low band (70-88 MHz) and the air band (118-136 MHz) make a welcome appearance.

Both handhelds use a broadband 'rubber duck' antenna, which covers VHF/UHF. This is quite adequate, although for better reception of a desired band, a more specific aerial is most useful. For UHF CB/police use, I find the 3dB flexiwhips used for 477 MHz handhelds are ideal.

The 100XL also includes channel lock-out, and a 3-second scan delay (switchable). It is worth pointing out that, unlike many other scanners, both the Bearcat 100XL and 175XL have delays that are programmed on a channel-by-channel basis and cannot be addressed to individual memories.

The 100XL also has a display light, to illuminate the LCD readout. When the 'light' button is pressed, the display is lit for 15 seconds in automatic (scan/search) modes, and 45 seconds in manual (monitoring a fixed frequency). It then goes off automatically, or by pressing the button a second time.

The 'search' function operates as with other scanners. By setting two frequency limits, it will continuously scan through the segment looking for any activity.

If you come across an interesting exchange, press 'hold' and the scanner will remain on that frequency. By pressing 'E' (enter), it can also be programmed directly into the chosen memory channel.

There is also a step-search function, to 'step' up or down one frequency at a time.

The LCD display doesn't flash wildly in search mode, but still moves at the lively clip of 25 channels per second (in 12.5 kHz steps).

To keep an ear on your favorite frequency, a priority function will check for activity every two seconds (this is preset to ch. 1).

The LED battery indicator flashes when a recharge is required, going off when charging has been completed. It also remains lit during recharging or AC operation.

Included with the 100XL is a very rugged carry case. The sort of case, in fact, that is normally an option with handhelds.

Any criticisms are more a matter of taste, really. A scan/search speed function, perhaps, or the feeling that the volume/squelch knobs are a mite tall and finnicky (the 50XL's flatter controls may have suited better).

None of which changes the fact that the 100XL easily earns its place on the top-shelf of scanners.

Bearcat 100XL

Dimensions — 74w x 178h x 35d (mm), weighs 570g.
Power — 7.2 vdc (6 AA nicads, or adaptor)
Frequency range — 66-88 MHz, 118-174 MHz, 406-512 MHz
Channels — 16
Features — lock-out, delay, battery indicator, keypad lock, search, priority, display light.
Accessories — nicads and charger/AC adaptor, earphone, carry case, antenna.

BEARCAT 175XL (Mobile/Base)

Portable scanners may be all the rage for some, but for mobile/base stations, it's good to have a choice.

The Bearcat 175XL comes with an AC adaptor for use in the home, although the handbook makes no mention of a vehcicle 12 VDC adaptor.

Both its size and appearance are good, coloured in pleasing dark brown and woodgrain. Again, the layout is excellent.

The LCD readout is quite large, and well-lit. Volume and squelch controls are sizeable, as are the keys. The keys are made of a softer rubber rather than metal or plastic, and their light but positive feel is an improvement over other materials.

Beneath the scanner, four rubber feet keep your table or desk unscratched.

The innards of the 175XL make it pretty much a base version of the 100XL portable, although a few extra features do appear.

The scan/search speed can be set to 'high' (the normal rate of 15 channels/second), or the slower 5 ch/second. A total of 16 memory channels are provided.

An auto-squelch setting is preset to allow all clear signals to be received, as well as a slow-discharge capacitor that provides a memory back-up for 4 hours if power is removed.

The in-built 1 watt speaker is very good, and will provide ample volume in most situations. But, if you desire, an external speaker can be connected via a socket on the rear panel.

The telescopic antenna also serves well enough, but a discone or other scanner aerial will of course pull in the weaker signals, which is often the case in country areas. A recessed slot beneath the 175XL holds the whip when not in use.

One peculiarity is the 'WX' (weather) function. According to the handbook, this 'searches all seven NOAA weather frequencies in your area...locking on to the one actively broadcasting in your area.'

These seven channels (162.4-162.55 MHz, in 25 kHz steps) are used in the USA, similar to weather broadcasts in our 156 MHz marine band. Here, they are likely to be a local council or tow-truck company.

I wonder how difficult it would have been to reset the WX channels to selected VHF marine frequencies, of considerable more interest and use to us? After all, Uniden already had to modify the 175XL for our VHF low-band.

Summing up — the Bearcat 175XL is as suited to the home as the Uniden portables are to the field — which is pretty good indeed.

Bearcat 175XL

Dimensions — 240w x 62h x 180d (mm), weighs 740g.
Power — AC adaptor (supplied)
Frequency range — 66-88 MHz, 118-174 MHz, 406-512 MHz, plus 162.4-162.55 MHz (USA WX)
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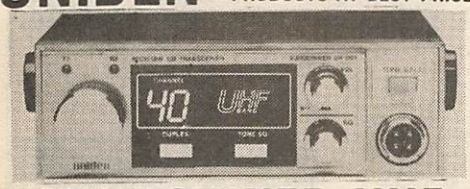

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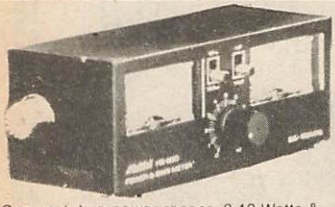

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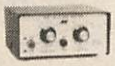

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UHF TAKES TO THE SKY

Ear-to-ear grins are the order of the day at Hatadi, following the success of their UHF CB network in the 1986 Wynns' Safari rally.

You'd almost think the team had collectively sired a bouncing baby boy. Well, almost — but it weighed considerably more than the average newborn, and bore the unusual name 'AIR-06'.

It was, in fact, Hatadi's airborne 477 MHz repeater, which formed the very backbone of the rally's communications system.

Proud 'father' and company General Manager, John Bishop, claims the repeater 'surpassed all our expectations. It has coverage over a 100 km radius, and the rally organisers were very impressed.'

So much so, that Hatadi have been re-appointed as official suppliers of communications equipment for the next Safari, in 1988.

Although the company supplied 27 MHz CB radios to a number of competitors in last years' rally both they and the organisers were dismayed to learn that over half of the field — amounting to some 130 vehicles — had no form of two-way radio at all.

In discussing the problem with rally officials, John Bishop developed a plan for a 'super-network' of UHF CB radios — close to 300 of 'em, fitted to every competitors' and officials' vehicle and linked through an airborne repeater!

Organisers and other officers were supplied with Hatadi's new Royce TS-133 slimline UHF rig, whilst the competitors were free to choose their own 477 MHz radio. A great many also nominated the Royce, which was well-suited to rally cars and bikes where space can be at a premium.

The task of designing and building the repeater itself — one which many would view as an unenviable one — was a challenge accepted by David Gill, of Captain Communications.

If John Bishop conceived the repeater, then David Gill and technician Allan Kallas were the able midwives — who delivered to Hatadi a masterly unit which did all it was expected to, and then some.

Working to Bishop's concept specifications, the Captain's team chose an AWA module, fitted and matched to cavity filters and a diplexer. A back-up unit was also constructed, to be pressed into service should mishap befall the first repeater.

'All credit for the repeater's excellent operation must go to David Gill and his team' says Bishop. 'We had no problems at all, and no reports of interference.'

'The Department of Communications were also very helpful' he stated, for the type-approval of the final unit and assisting Hatadi a great deal in licensing this most unusual repeater.

Allocated to 6/36, AIR-06 travelled aboard a Cessna 172 aircraft, above the long line of adventurers in a race that passed through northern NSW, central Queensland and the Northern Territory. The entire route is, in fact, a well-kept secret, and is only revealed to competitors a day prior to their start from Sydney.

'We had a lot of co-operation from the public' Bishop says, in regard to the thousands of UHF hobbyists and business users who were easily able to access the repeater, 'and we greatly appreciate it.'

Ch. 6/36 itself was primarily used for general broadcasts of interest to all vehicles — organisers' instructions, safety information, and in the event of emergencies. Direct car-to-car communications were carried out on ch. 7 simplex, to reduce traffic on the repeater.

'Also, the CREST monitors in the Northern Territory were helpful, monitoring UHF ch. 5 for any emergencies' Bishop reports, 'and we would like to involve monitors more in future events.'

Still, Hatadi are refusing to rest on their laurels. With their involvement in next year's Bourke-to-Barrier Reef Bash, organised by the Variety Club of Australia, they've got just enough time to catch their breath — before it all starts again!

Having survived the marathon Sydney-Darwin journey, and served its masters well, AIR-06 has now been de-commissioned. The AWA module is being retained by Hatadi, although the back-up unit — complete with diplexer and cavities — is now for sale — almost a ready-to-go repeater. Interested parties should write to Mr John Bishop at Hatadi.

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THE CB PLL DATA BOOK is the CB modifier's Bible. This all-new International Edition covers over fifty specific phase-locked loop ICs, with manufacturer's cross-references. Price **$10** including postage.

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Queensland Scene

By ROD FEWSTER

Oh, dearie dearie me!!

Did The Big Bad Rod upset the poor little Good Buddy wimps by laying a few home truths on them in the last couple of Queensland Scenes?

Never mind, possums.

Just lock yourselves in the toilet and sit down and have a good cry, then put on your favourite Village People costumes and write a few anonymous letters.

Make sure that you use different typewriters for each letter and post them on different dates from different suburbs, won't you?

And use different paper and envelopes for each one, won't you?

And be sure that you don't make the same spelling mistakes in each letter, won't you?

Otherwise people might think that the same group of limp-wristed faggots wrote them all.

★ ★ ★

What's wrong with the Western Radio Club?

Have all the members got AIDS or leprosy or something.

It seems like every time I read CB Action someone is taking a cheap shot at them.

I don't visit Sydney very often. Life down there is just too fast for this poor old country boy. I don't know first-hand what's going on with the WRC, but I'm certainly not getting the true picture by reading CB Action.

Ours is a communications hobby, however, and it's amazing what information one can pick up around the bands.

Take the 2/32 repeater fiasco. A classic example of biased reporting if ever I saw one. There are two sides to every story, and in this case they're as different as cheese and chalk. I don't know which faction is in the right, but responsible journalism dictates that, when faced with such widely-conflicting versions of the same story, both sides should be equally presented.

I learned from a Townsville operator who is an officer in The Salvation Army that the Western Radio Club provided invaluable assistance during the recent Sydney floods, and that the WRC can always be counted on to come to the party during any emergency, large or small.

How come I didn't read about this in CB Action?

(I also learned that Ken, an old Kilowatt Tango pirate mate of mine from many years ago, is now a Salvo and a WRC member. I first met Ken on-air when the loosely-knit fraternity of old-time pirates risked prosecution by setting up a communications network after Cyclone Tracy devastated Darwin. Looks like he's still in the Good Samaritan business. If you read this, Ken, drop me a line or two. I'm still at the same address.)

Last year the WRC hosted a number of Sydney Scout groups during JOTA, the annual Jamboree Of The Air. I heard the other day that they'll be doing the same again this year only bigger and better, demonstrating Packet Radio and allowing Sydney Scouts to talk with fellow Scouts in other countries via the recently-launched Japanese Amateur Radio satellite JAS-1 courtesy of Andrew VK2XKK, although it will be all over by the time this issue hits the news stands.

How come I didn't read about this in CB Action?

A number of CB Action contributors are domiciled in Sydney. Are they ALL deaf and blind, are they merely anti-Western Radio Club, or are they competing with one another to take the title of "The Nastiest Bastard on Radio" away from me?

Before anyone starts jumping up and down and screaming that I'm living in a glass house and shouldn't throw stones I'd like to point out that, before I put pen to paper and poke it up someone, I try my best to ensure that they DESERVE it. Sure, I make mistakes in judgment, but not very often, and when I do I admit it. And for those who are wondering who gave me the right to be judge and jury . . . take a look at yourselves. If you can do a better job I'm sure The Editor would be glad to hear from you.

★ ★ ★

In the last issue I advised readers against sending money for the apparently non-existent "Scanner Frequency Register".

Editor Smith added a footnote pointing out that this publication had no connection with the ESG Frequency Register mentioned by John Wilmott in the same issue.

I'm glad he did.

The ESG Frequency Register DOES exist. I've got a copy of the Queensland edition, hot off the press, and it covers the VHF and UHF portions of the spectrum in fine style.

It's 244 well laid-out pages are in loose-leaf format in a sturdy ring-binder, allowing the addition of your own notes, and if the publishers are considering future updates they can be easily inserted in the right place.

As well as the Queensland Register, editions have already been published covering New South Wales, Victoria, South Australia and the ACT. By the time you read this Western Australia, Tasmania and Northern Territory editions should also be available. ▶

If you're into scanning, get one!!
They're available from ESG, PO Box 280, Hahndorf, 5245.

★ ★ ★

The Great Channel 35 Controversy rages on!!

On the one side we have a few wimpy groups and a few even wimpier individuals (all of whom claim to be "old-timers" amid shrieks of contempt and derision from the REAL "old-timers") arguing that 35 LSB is a "Gentlemen's Agreement Call Channel", "The International Call Channel", "The Official DOC-Designated Secondary SSB Call Channel", "The DXers' Call Channel", or something equally ridiculous, and on the other side we have the rest of the CBers in Australia.

Let's take a bit of an historical look at 35 LSB.

Back when the FCC gave American CBers forty channels thousands of out-dated crystal-synthesized 23-channel rigs were dumped on unsuspecting Aussie CBers.

In double-quick time DOC, (or the "Radio Branch" as they were commonly known in those days) foisted the now-defunct 18-channel allocation on those who hadn't already succumbed to 23-channel fever, while generously allowing 23-channel rig owners to legally use only sixteen of their channels. Of course, many of the naughty operators continued to use the other seven channels anyway.

40-channel rigs were a no-no, but 40-channel switches were readily available as many legal 18-channel rigs were imported in 40-channel trim and had been converted locally. The ease with which they could be reconverted soon brought "forty-channel pirates" on to the scene, and for a brief period 35 LSB became the "in" channel for these operators to contact American CBers.

As more and more people discovered small-time piracy, dedicated bootleggers, disgruntled by the Good Buddy invasion, moved to higher and lower frequencies, totally abandoning 35 LSB as a meeting-place and avoiding the channels between 27.225MHz and 27.405MHz like the plague. (It was commonly, but mistakenly, believed back then this was the part of the spectrum where one was most likely to get "busted" for out-of-band operation, and one ridiculous rumour which persisted for months even reckoned that it was illegal for the RIs to monitor above 27.405MHz.)

Out of the blue DOC dropped forty channels on the masses. The "forty-channel pirates" became legal operators overnight, and swarms of newcomers appeared on the higher allocation.

A few Good Buddies, wimps who almost certainly had never dared venture above 27.225MHz before it became legal to do so, began touting themselves as "old-timers" and set themselves up as the gurus of 35 LSB, preaching their "Gentlemen's Agreement" and "International Call Channel" crap to the newcomers.

Some of the REAL "old-timers" took exception to this, and to this day the argument about whether or not 35 LSB is a call channel continues unabated.

★ ★ ★

Until recently I practically ignored 35 LSB. As far as I was concerned 16 LSB was the SSB call channel. I was aware that the Albatrosses had been hassling DOC about designating 35 LSB as a call channel and I'd listened to various operators arguing about it a few times over the years, but I couldn't really have cared less about it one way or the other. Live and let live.

A few months ago I came across a friend of mine on 35 LSB and we struck up a bit of a conversation. Within seconds we were told, "Piss off the International Call Channel you stupid bastards" or words to that effect.

Now I don't know how the rest of you take to this sort of thing but I don't take kindly to being told to "piss off" by microphone commandos. We stayed right where we were.

Pretty soon the burps and farts and whistles started, then the local FM Rock-in-Stereo station came on, and after a few minutes we moved off to another channel. We'd made our point.

Guess what? The self-appointed guardians of 35 LSB (there were three of them by this time) took all of thirty seconds to locate us and the farting, burping, music, etcetera, started all over again.

Being the true diplomat that I am I returned to 35 LSB and carried on my conversation there, despite enormous interference from the three wankers and a few of their suckerfish mates, for over an hour.

I rang DOC the following day asking for official clarification of the situation, and was told that (a) 35 LSB is not, has never been, and probably never will be, a call channel, (b) there is nothing to prevent any operator from carrying on a conversation on 35 LSB, and (c) the ONLY designated call channels are 11AM and 16LSB, but there is nothing to prevent any operator from calling on ANY channel (apart from 9 which can be used for emergency calls only) PROVIDED THAT CHANNEL IS NOT IN USE. The ONLY channels which cannot be used for general conversation are 9, 11 and 16.

I then decided to take a greater interest in the 35 LSB dispute.

Those wankers who continually argue that 35 LSB is a "Gentlemen's Agreement Call Channel" invariably claim that the MAJORITY of CBers use 35 LSB as a call channel.

Apart from the fact that I'm totally unreasonable I'm quite fair-minded and easy to get along with, so I did a bit of a survey the following Saturday afternoon.

I set up two rigs, one on 35 LSB and the other on 16 LSB, and noted every genuine call I heard on both channels for an hour. There was a bit of north-south skip running,

and a number of the calls originated from DX stations. I counted each call as a unit even though some operators called several times. At the end of the hour I had logged 126 calls on 16 LSB and 11 calls on 35 LSB. I was a bit surprised at these figures, so I logged another hour's worth. During the second hour I logged a further 78 calls on 16 LSB and a further 29 calls on 35 LSB.

I suppose the wimps will counter these findings with a claim that this vast MAJORITY of operators who claim 35 LSB as a call channel would have been out playing football or surfing or mugging old ladies or wanking or engaging in some other macho pursuit on a Saturday afternoon rather than sitting around talking on CB, but the figures speak for themselves.

If anyone's interested enough to bother, try listening to 16 LSB for a while then switching over to 35 LSB. Sure, 35 LSB is BUSIER, but most of the traffic is argument for and against the channel being used as a fall channel. Many, many more CALLS are made on 16 LSB.

★ ★ ★

And now here's a warning to that small band of childish little "Gentlemen's Agreement" faggots in the Brisbane area who lurk on 35 LSB ready to pounce on and abuse anyone who tries to carry on a conversation on the channel.

Over the past few months I've paid particular attention to your continual lecturing, carrier-dropping, jamming, disruption of conversations, and all-round ignorant treatment of any operator who doesn't go along with your selfishness, and I'm disgusted at the lengths to which you will go to preserve your "own" territory.

Your performance changed my attitude towards 35 LSB from "I couldn't care less about a few miserable misfits wanting to use it as a call channel" to "I'll talk on it whenever I feel like it".

Your own collective stupidity is responsible for the endless bickering on 35 LSB and for my current predilection for using same as a general conversation channel, and unless DOC is ever foolish enough to kowtow to the loudmouthed minority and designate it as an OFFICIAL call channel, you'll wear it until I vacate the frequency of my own volition.

Nobody, and I mean NOBODY, is going to interfere with my conversations on 35 LSB or any other channel and get away with it for very long.

If you find a sleeping crocodile the smart thing to do is to walk quietly away. If you poke it with a stick it's likely to bite you.

Keep on aggravating me and I'll do my damnedest to have you charged with harassment.

★ ★ ★

While we're on the subject of harassment . . . if you think the Brisbane RIs aren't interested in this aspect of frequency management, think again!!

One operator from just north of Brisbane has already been charged with harassment on both the UHF and 27MHz bands as well as unlicensed operation, and he'll be appearing in court in due course. This looks like being the first harassment case ever prosecuted.

Charges are being considered against another operator for harassment and out-of-band operation. The operator allegedly jammed the 7/37 repeater, and if DOC decides to go ahead and prosecute will probably be charged with harassing "divers of Her Majesty's subjects" or something similar rather than harassing an individual operator. This operator allegedly admitted to transmitting out-of-band, but the RIs did not find a transceiver capable of doing. so. Radio Inspectors did seize a Philips FM-620 which had been fitted with a GaAsFET pre-amplifier. Strictly speaking, because this transceiver had been modified from type-approved specifications it had been rendered unlicensable and subject to confiscation, and the operator could be open to further prosecution. Personally I feel that this would be carrying things to a ridiculous extreme, considering the nature of the modifications. I hope DOC sees it in the same perspective.

Harassment charges are being considered aginst yet another operator after he allegedly read a poem poking it up commercial UHF-CB users a number of times on the 7/37 repeater. Radio Inspectors seized two-and-a-bit transceivers in a Sunday morning raid. This operator allegedly attacked one of his three rigs with a sledgehammer, totally trashing it before the RIs grabbed it, only to be told that current DOC policy is to return legal equipment whether prosecution is launched or not and regardless of the outcome.

Incidentally, commercial UHF-CB users are not immune from harassment charges. A few Brisbane commercials would do well to keep this is mind. Hobbyist CBers have at least as much right to use the repeaters as do commercial users, even during business hours, and some of them are getting rather annoyed at being rudely told to keep off the "commercial" repeaters practically every time they open their mouths. There should be enough room on the repeaters for everyone. All that's missing is a bit of courtesy and common sense.

★ ★ ★

Finally, you pathetic wimps can keep on writing your snotty little anonymous letters to DOC and Peter Smith until your slimy fingers drop off, and you can keep crapping on about how "Rod Fewster's use of 35 LSB as a QSO channel is bad for his business" until your scabrous lips turn to mush.

The RIs sell your letters to a toilet paper manufacturer to offset the cost of the time they waste reading them, Smithy throws them into the wastepaper basket without even reading them at all, and not one of you will live long enough to see the day I need to look to the likes of you for my next meal.

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A sample of the award is reproduced below.

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1. One QSL card from each state and territory of Australia — Victoria, New South Wales, Queensland, South Australia, West Australia, Tasmania, Australian Capital Territory and Northern Territory, totalling eight in all.
2. All contacts to be made after 1 July 1977.
3. If no QSL card is available, a letter of confirmation to replace the QSL card will suffice.
4. Endorsements will be made regarding all contacts on SSB, or AM, or both — all on the same channel etc.
5. There is no limit to the number of certificates.
6. Each certificate is numbered, and a record is kept of the persons to whom they were awarded.
7. The cost of the certificate is $2 if collected personally, or $3 if posted.
8. Delta Base, or their representative to sight the QSL cards.
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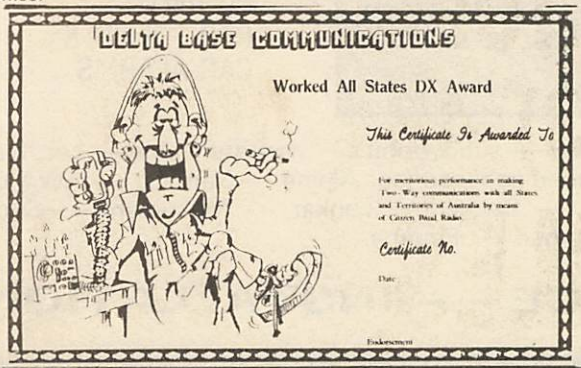

So 27 meggers, resurrect that old beam, blow the spiders out of the rotator and get stuck into it.

Address all applications for the Award to: **Delta Base Communications, 889 High Street, THORNBURY, Vic. 3072.**
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ANTENNA TEST

MOBILE ONE'S NEW RANGE

Away back when CB Action was a monthly magazine running to 140 pages and a circulation in excess of 40,000 copies per issue, Mobile One was even then one of the major suppliers of CB antennas.

The owner, Greg Ackman, has been involved with CB since the very early "pirate" days when it was quite legal to own and sell CBs, but, it was not legal to operate it on air.

What a bloody farce . . . !

Even then, Mobile One had a reputation for designing and building top quality antennas — a reputation not easily won, as in those days there were literally dozens of "make a quick dollar" operators pushing antennas as fast as they could turn them out from their garage.

These "backyard" antennas were invariably of doubtful quality, but, they looked OK and it wasn't until the poor bloody operator started to use them that they proved to be of little or no use, which didn't do the operator much good — chances were that the builder had made his dollar and headed north at high speed.

Mobile One not only stayed out ahead during the boom period, but, also continued to improve and refine their wide range of antennas.

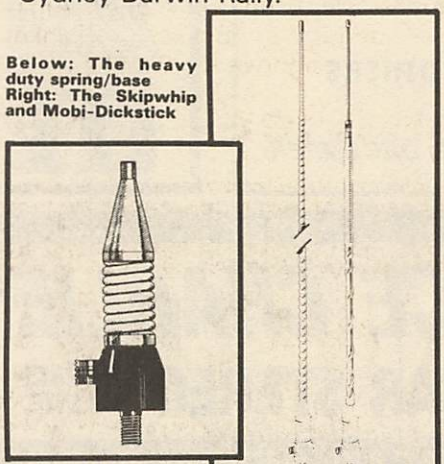
In the middle of this year, the company introduced a new range of mobile antennas to the market and these are arguably the best looking and best made of the current available crop.

We received four of them for test and review and of these all trimmed back to a SWR reading of as near to 1:1 as damnit is to swearing.

Two of the antennas require physical "trimming", and two have an adjustable metal top insert which can be moved up and down by loosening the Allen key screw.

To the best of our knowledge these are the first CB mobile antennas to incorporate a very heavy duty mounting spring at the base which couples to an equally heavy duty vehicle base mount.

We've had the four test antennas for a couple of months and all have been used around town with first class results, however, we put each of them to the ultimate test by sending them off with our Range Rover to cover the recent Wynns Safari Sydney-Darwin Rally.



Below: The heavy duty spring/base Right: The Skipwhip and Mobi-Dickstick

During this run they copped general physical abuse from low hanging branches and vehicle-high scrub — all survived and continued to operate extremely well.

By contrast, many of the competing vehicles had their antennas reduced to a few strands of broken fibreglass and wire within the first couple of days.

We had expected that results might vary with each antenna, however, this proved to be incorrect and report were literally identical right across the board.

When directly compared with reports on different makes of antenna the Mobile One units were marginally better in most instances and, on a couple of occasions, they received markedly better reports.

The units tested were:

DX270SS - Skipwhip

This antenna measures 1.83m in height and is a constant turn ¼ wave whip with a power capacity of 500 watts. It showed almost no wind-bending on a vehicle travelling at 60 kmh and medium bending at 100 kmh.

DX560SS - Monster Stick

This antenna is a heavy duty unit with an adjustable tip and measures 1.53m in height with a power capacity of 250 watts. Whereas the Skipwhip was mounted on the rear bumper, this unit was mounted on the bullbar and wind-bending was minimal at speeds to 100 kmh.

DX350SS - Mobi-Dickstick

Another adjustable tip antenna, but, for lighter duty work than the Monster Stick. It is slightly shorter with a height of 1.27m and is ideal for roof-rack mounting with little wind-bend up to 100 kmh.

DX9SS - Skyscraper

This one measures a huge 2.54m in height and is a computer designed fibreglass encapsulated ¼ wave unit. When mounted on the rear bumper it showed about the same bending as did the Skipwhip and despite receiving a thrashing from low branches it stayed intact and operating well.

Overall, these four antennas not only look great, but, they also perform as well as they look.

The separate heavy duty mounting base is beautifully made from high impact polycarbonate and all parts have been suspended in this material to virtually negate any effects from water, dirt and dust — and there was plenty during the test.

Candidly, we can't think of a tougher test than those given to these antennas and the fact that they both lasted the distance and operated well is a credit to the manufacturer — Mobile One.

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- Phase Locked loop frequency control and high level modulation team up with 4 full watts output—maximum range.
- Full accessories include mic with pre-wired plug, fused DC power cord for voltage protection, mounting bracket and hardware.

COCKATOO is a CB radio that delivers a power punch from a sleek, trim-line chassis. CB'ers want "talk power" but they don't want a noisy receiver. COCKATOO gives them both plus some extra features like digital meter, TX/modulation indicator, public address amplifier, L.E.D. channel indicator. Nothing says CB like COCKATOO ...so remember the name when you want the best!

SPECIFICATIONS

Unit Size: 1 9/16" h x 4 13/16" w x 6 5/16" d

Unit Weight: 3 1/2 lbs.

Shipping Weight: 4 lbs.

Accessories Included: 500 ohm push to talk microphone with coil cord and din connector. Microphone clip. Fused 3-pin DC power cord. Mounting bracket and hardware. Owners manual. Required FCC forms.

Frequency Control: Phase Locked Loop

Receiver Sensitivity: 0.7 uV for 10 db (S+N)/N

Receiver Selectivity: More than 55 db/10 KHz

Controls: On/off/volume. Variable squelch. CB/PA switch (on squelch). Channel selector with readout. Digital signal/RF power meter and TX/MOD indicator.

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HATADI PEARCE-SIMPSON

Its official title is Hatadi Electronics Corporation Pty Ltd.

To CBers it is simply Hatadi, or the brand name it is most renowned for — Pearce-Simpson.

The beginnings of Hatadi go back to long before the first Pearce-Simpson CB rigs appeared, back to 1969. The company itself did not take shape in its present form until 1975 — but, by either standards, it is a survivor. Hatadi remains the longest-standing continuous CB radio importer/wholesaler in the country.

One of the keys to this must be the sheer variety of equipment produced. "We have the largest range of 27 MHz CB radios in Australia," says Hatadi's general manager, John Bishop. "With 11 AM rigs, and seven sideband units — not including handhelds or base stations — we are very strong in 27 MHz."

Not only is the size of the line-up impressive — it covers every possible level of features and price. Hatadi's continual turnover and introduction of new models, with others updated and improved from their predecessors, keeps the range fresh and dynamic.

Newest releases include the Super-Tomcat II and Super Puma (now with a matte black fascia replacing the chrome look), both slimline SSB mobiles.

"The Super Puma has always been accepted by CBers as being as good as, or better than more expensive products," says Bishop, "and now it looks the quality rig it always was. Both radios are made to fit into today's compact vehicles, but are — despite their size — very much deluxe models."

For its legion of HF enthusiasts, Hatadi plans an exciting year to come.

"We have recently been appointed as Australian agents to Hyundai Electronics," Bishop states, "which is a leading name in the industry. Their products include home electronics, car stereos, satellite receiving systems, cellular radio — all at very competitive prices. Hyundai is very high-tech, and offers the best gear with the best back-up."

The first release of the new 'Hatadi-Hyundai' label is a compact AM rig, model number '10-4'(!). Priced around $139 this unit boasts LED metering and electronic channel selection, in an exceptionally robust package — and typifies the high-quality Hyundai product.

The Hyundai agency only adds to the number of brands that Hatadi now represents. They are the newly appointed distributors for the famous Cobra range, which will return to the shelves in early 1987 with two AM and two AM/SSB mobiles.

Having seen the new Cobra units at Hatadi's offices, they instantly appeal — their clean, uncluttered styling is more akin to the most modern sound gear or, perhaps, the look of the Sawtron 990 UHF rig, than of a 40ch CB radio. Expect to hear a lot about these rigs in the near future.

Earlier this year, Hatadi also announced the return of the well-known Royce brand of CB radios. Royce is a familiar name to enthusiasts from the earlier days of Australian CB, and Hatadi has set about to re-establish itself as a force in quality rigs.

"The forthcoming Royce AM unit is a top-line radio," says Bishops, "and is set for release in November. Next year will see the release of the TS-639, which is a deluxe AM/SSB mobile, and will be one of the best on the market."

In the 'deluxe' stakes, Royce's standard-bearer has been the TS-133 UHF which, according to Bishop, has been accepted extremely well. People do like its many features, although it is still a simple radio to use, it is very small and appeals to many people.

One of the design inovations of the TS-133 was the provision for a nicad power source, which makes it into a full-feature 40ch portable.

The optional 'Porta-Pack' has now been released and again has proved popular, especially with farmers and commercial users. "The 20 nicads supply 14 hours operation," claims Bishop, "and that's at five watts output. No UHF CB handheld has anywhere near that output."

As Royce continues to hold the 'full-feature' mantle, Hatadi has introduced a second UHF — the Leopard Mk II.

The new rig, which follows the original mid-range Leopard, is intended to attract the no-frills, low-priced end of the market. Bishop says it will retail for under $400. It has an analogue meter, as the more common LEDs have been complained about by a lot of people; volume, squelch, duplex and optional selcall.

Hatadi will aso be marketing scramblers for UHF CB. Bishop says, "Although we are aware of the ill-feelings of people about this, it is once again the minority that misuse scramblers and make problems for everyone. A minority of people misuse the UHF band, but it isn't entirely canned for that reason.

"We are also looking at a repeater kit, a complete system because, as more and more people move onto UHF, repeaters are going to become more and more necessary. In fact I feel that the Department should lift its present limit of three repeaters per capital city. I believe a place the size of Sydney could take five or six repeaters comfortably. It would lessen the load considerably," states Bishop.

Antennas and accessories aren't left behind, either. Hatadi's newest item is a Z-shaped antenna bracket which allows an antenna to be mounted on a car bonnet or boot without drilling holes.

The wide range of items are used to their full potential in Hatadi's many community service ventures, where it often looks after all aspects of the supply and operationof CB radios.

Their efforts in the Wynns' Safari series for which they are the official supplier of communications equipment, are well known — especially after this year's airborne 477 MHz repeater project.

The Variety Club of Australia has also benefitted from Hatadi's generosity. Its charity fund-raising Bourke-to-Barrosa Bash (where extra points were given to contestants who cheated!) used Super-Cougar Mk II AM rigs. Next June, the zany event returns as the Bourke-to-Barrier Reef Bash. Once again, Hatadi and CB radio will be there.

However, it may surprise readers to know that Hatadi deals in more than CB radio and related areas. You can't appreciate how broad based it is until you browse through a copy of Hatadi's 'Sound Advisor' catalogue. Over the past five years, the Sound Advisor has supplied product information and general data to an eager public. The 1986-87 edition sees a new format with increased information.

Distributed throughout Australia by Hatadi's extensive dealer network, the 80,000 free copies will once again find their way into the homes of radio and electronics enthusiasts.

Nineteen-eighty-seven will, in fact, see increased activity in a great many areas:

— marine radio both 27 MHz and VHF, to be released under the Pearce-Simpson brand;

— depth sounders (many orders for which have already been placed);

— telephone products, and possibly a video-intercom and PABX system;

— car and home hi-fi and entertainment;

— VHF and UHF commercial two-way radios;

— security systems for home and commercial use;

— cellular radio and satellite receiving systems.

"The future looks very bright and promising," says Bishop. "There is so much new technology, and so many exciting prospects. Satellite TV, for example, is promising, especially for the possibility of Pay-TV and other services for city dwellers. Until the government decides policy, it is, of course, a limited area."

"Hatadi will be involved in the new cellular mobile systems. We will be competing with big firms and multi-nationals, but I think that our lower overheads and increased emphasis on product, price and service will make it a real challenge."

The Hatadi team enjoys a challenge like nothing else, it seems, enjoys forging ahead into new areas. Is this what makes them 'the great survivor'?

"Hatadi is all about being responsive to new technology to new trends in electronics and communications," says Bishop. "We have our own in-house research and development section, and maintain close links with our suppliers. We can change directions, design and manufacture to meet these trends very quickly."

"We are not a cumbersome company; we can adjust rapidly — as the field is constantly changing, you've got to change with it or be left behind. Hatadi is in the forefront, we change with the times — not after them."

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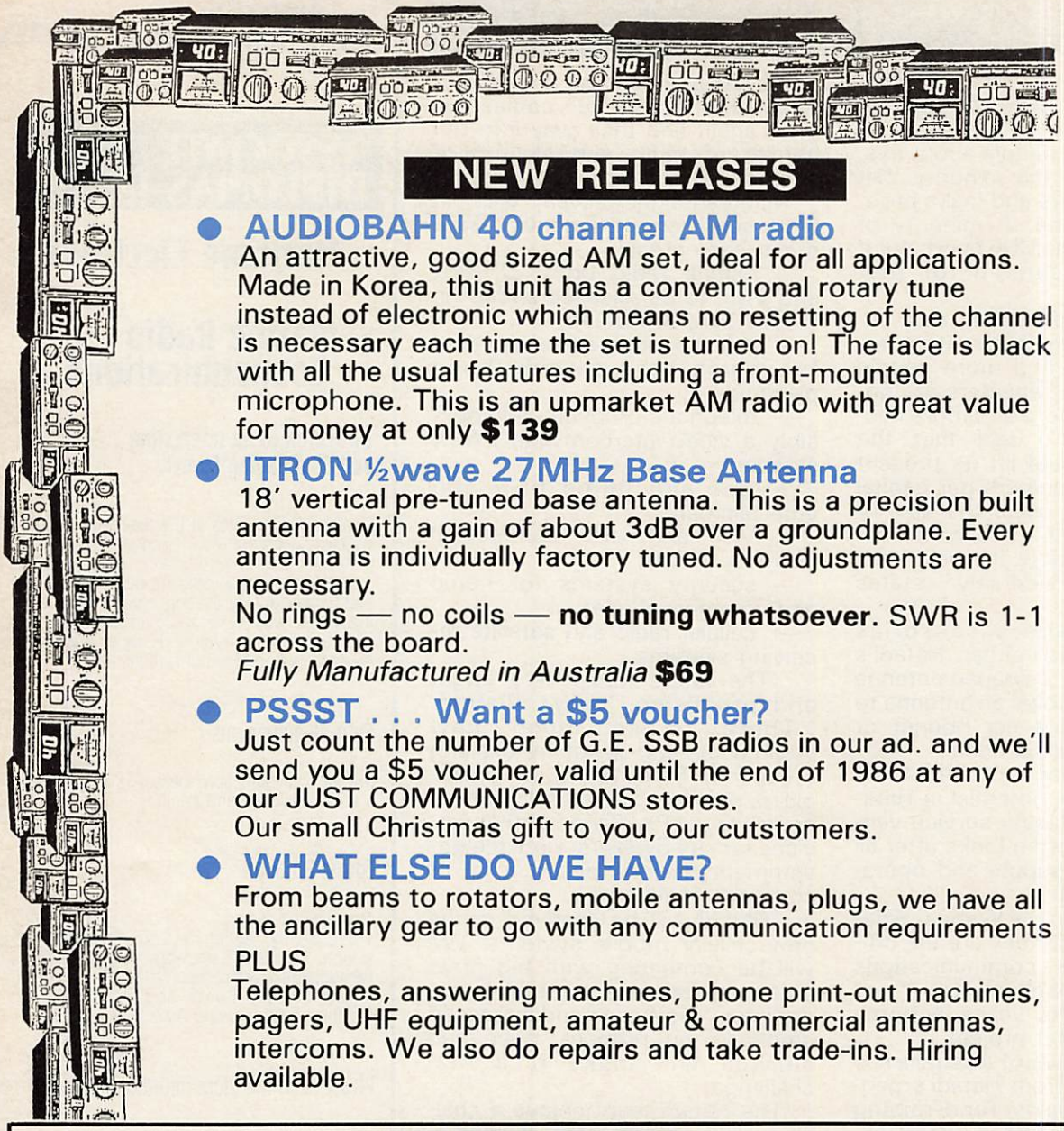

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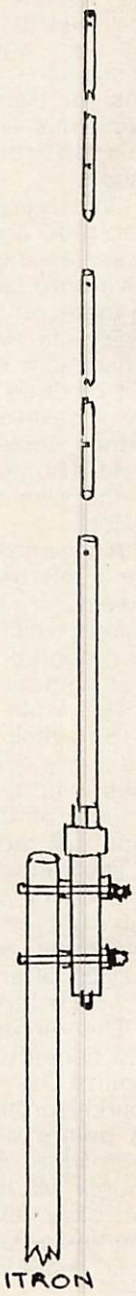

WARNING!

We believe there are cheap antennas on the market imitating the ZCG base construction, to cash in on the name & style of ZCG antennas. These antennas cannot & will not perform as well as the original. MAKE SURE THE BASE IS STAMPED "ZCG".

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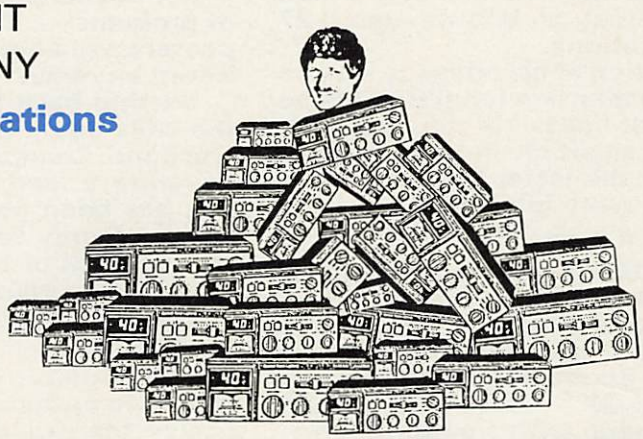

JC

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"we'll get you talking"

OUT WEST

By DON STEWART

My piece about the use of a folded dipole antenna, on page 39 of the last issue, contained the sentence ". . . the whole idea of a repeater is to get the best saturation effect in the city as compared to the dipole."

Some readers were quick to point out that this doesn't seem to make much sense, but it does when you get the bit that the typesetter left out.

What is should have read was ". . . the whole idea of a repeater is to get the best saturation * of the widest area possible so your customers get the best results for their money. They don't use a 9dB vertical because of its higher angle of radiation and lack of saturation * effect in the city as compared to the dipole."

The astericks show where the thread was lost and picked up again. Knowing how easy it is to make a mistake like that, I won't demand my money back. (That's his excuse — and he is sticking to it . . . Ed).

★ ★ ★ ★

Still not much to report on 27 MHz. There have been odd patches of skip, but nothing to write home about.

I did have a very nice letter from WBA170 Robert from Port Hedland telling all about a 2000 km trip down the old Canning Stock Route from Halls Creek to Wiluna, using 27 MHz for communications.

Robert's description of his odyssey was so well written (not to mention long) that I have passed it on to Peter "as is" in the hope that he will include it as an article in its own right.

Many thanks for the letter Robert, I hope you get to see the story in print.

★ ★ ★ ★

Another letter which I have to give a bit of space was from BR 356 Dave, current president of Bunbury Radio Club Inc. He says: "I would like to inform your readers, through your column, that Bunbury Radio Club Inc, have commenced a DX — QSL competition for our junior members, with a perpetual trophy to be competed for. The junior with the most QSL cards, one per contact, to be declared the winner.

What I'd like to ask your fans is that, should they hear any of our juniors calling for a DX copy, (their callsigns are preceded by a zero, i.e. Bunbury Radio O24) please come back to them, give them encouragement and acknowledge them with a QSL card.

This is our method of enthusing our juniors to using the radio and helping to make them good and courteous CB operators.

With anticipation I will thank all CBers, in advance, for their cooperation in our club project."

★ ★ ★

Channel 5 emergency repeater in Perth is up and running as of 23 September.

From what I have heard on air its performance has not exactly set Perth on fire, but a bit of fine tuning should improve it a lot. Full marks to CREST WA (and any others involved) for pushing ahead with it.

Having said that, I now have to ask, "Will it serve any useful purpose?" I can't help thinking that the money would have been better spent on another "talk" repeater to ease the congestion on channels one and three.

Going by what I have heard from other stations, I don't think I am alone in this line of thought.

Some of the questions I have heard discussed are:

"How many UHF emergency calls have Perth CREST handled in the past?"

"Is CREST going to monitor both 5 and 35 in case a caller can not access the repeater, but could make it on simplex if he thought to try it?"

For the second question, I can see all sorts of probems — like, what about the other repeaters and how many channels can be monitored anyway?

Getting back to the first question, I'll bet the calls could be counted on the fingers of one hand. Channel 2, which is a busy repeater covering a land area of about 3000 square km, has been going for one year now and I know of only four emergency calls in that time, and all of these were quite adequately handled by ordinary CB users.

Don't get the idea that I am anti CREST — having spent some 200 hours on roster as a CREST monitor before I got fed up with listening to nothing, for people who don't care, I have the greatest admiration for the concept and for anyone who can stick with it, but we have to be realistic.

Having an emergency channel on 27 MHz CB is a necessity — Local range is good on SSB and, if noisy skip reduces local range, messages can be relayed via distant stations. Most 27 MHz channels are busy, so it pays to keep one channel clear so that faint calls can be heard. UHF is a different ball game entirely — if a station is strong enough to break through the mute it has as much chance of being heard as any other.

TOWN	CHAN	CALL	NOTE	SITE	SPONSOR
Perth	1/31	PER 01	Yes	Wanneroo	Philips
Kellerberrin	1/31	KLB 01	Yes	—	Cent W/bet Rep Gp
Meekathara	1/31	MKT 01	Yes	Hill View Stn	—
Wickham	1/31	WIK 01	No	—	—
Denmark	1/31	DEN 01	Yes	—	
Bunbury	2/32	BUN 01	Yes	Shenton Ridge	Greyhound TV Svc
Bencubbin	2/32	BCB 02	Was	—	—
Perth	3/33	PER 03	Yes	Roleystone	Philips
Albany	3/33	ALB 03	Yes	Mt Melville	—
Boyup Brook	4/34	BYB 04	Yes	Dinninup	B/Brk Farm Com Gp
Esperance	4/34	ESP 04	No	—	—
Lancelin	4/34	GNG 04	Yes	Lake Karakin	Gingin Shire
Kulin	4/34	KUL 04	Was	—	—
Perth	5/35	PER 05	Yes	Maddington	CREST WA
Margaret River	6/36	MGR 06	Yes	Ellen Brook	UHF Assn of WA
Wyalcatchem	6/36	WKM 01	Yes	—	D & G.J. Peace
York	7/37	YRK 07	Yes	Mt Bakewell	UHF Assn of WA
Coolgardie	7/37	COO 07	(?)	Mt Burgess	—
Mount Barker	7/37	MTB 04	Yes	Mount Barker	Plantagenet Rep Gp
Ravensthorpe	8/38	RVT 08	No	—	—
Manjimup	8/38	MAN 08	No	—	—
Wongan Hills	8/38	WON 08	No	—	—
Portable	8/38	MTX 08	Yes	Anywhere	WAX 732 Gary

Your average CREST monitor will have a 6dB antenna on a 10 or 15 metre pole and his local coverage will be about 6 to 8 km. The repeater increases this range considerably, but it is in the city which is well serviced by telephones anyway.

To put it in a nutshell, the chance of an emergency occurring within the monitor's range, with a UHF mobile on the spot and no telephone available, is as remote as the chance of my six numbers coming up in Lotto.

I don't know what the rest of you think, but I believe that keeping two channels aside for emergency calls on UHF CB is a complete waste of air space and having a repeater on those channels for emergencies only is a waste of money.

★ ★ ★ ★

I have been hunting around for the past month trying to get a complete list of WA repeaters — what a job! One thing I have found is that the repeater list in the last issue is so far behind that it might as well be scrapped. Why don't you people write and let the list editor know what is going on in your area?

The list I have compiled covers all repeater licences issued in WA up to 30 Sep 86 and the information about each one is the best I have been able to gather. Next to each call-sign is a note — "Yes" means it is believed to be operating, "No" means a licence has been issued but the repeater is not up yet, "Was" means it has been heard but nobody knows if it is still going and (?) means nobody knows if it has ever been on air.

★ ★ ★ ★

That's my lot for this time. I know it's a bit light on, but I have had a busy month, I will try to get a bit more next time around. Remember the address — PO Box 31, Bunbury, 6230 or phone (097) 25 1284.

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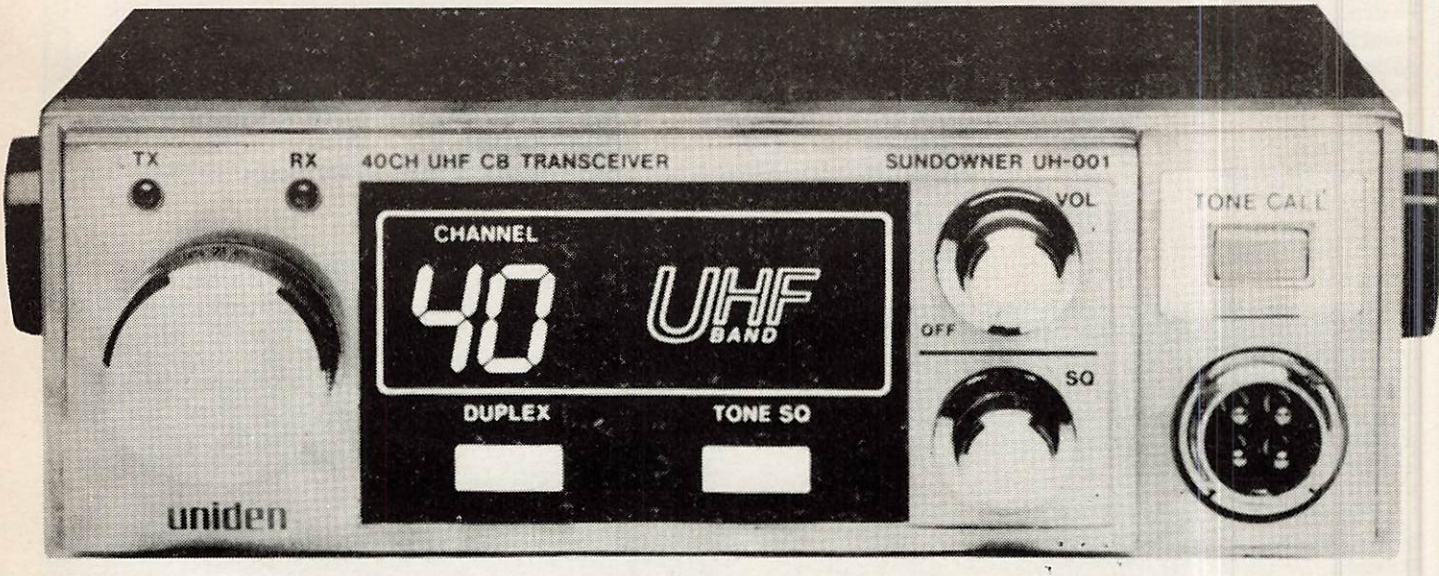

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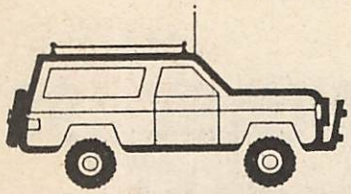

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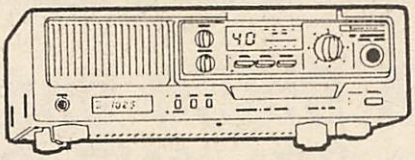
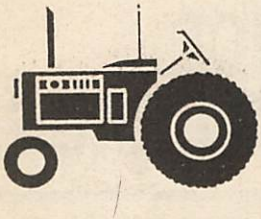
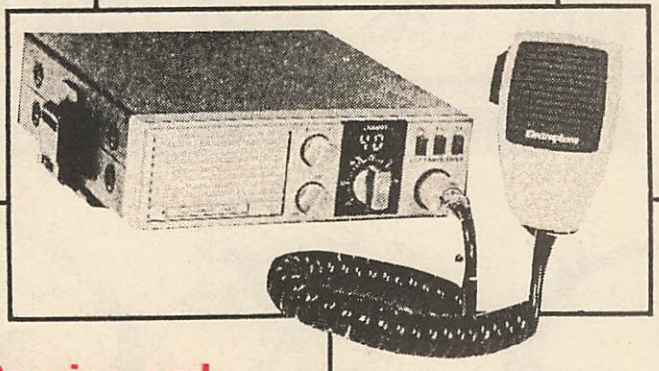


YOUR TRACTOR



YOUR HANDHELD



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UHF NEWS

By Greg Towells

I have had some letters from readers recently — and to them, 'thank you'. My comments regarding certain operators inhabiting a frequency and assuming ownership of it was a sore point amongst most writers.

One UHFer from Hobart informed me that commercial operators in that city are a major problem, with regard to them taking over a channel and ordering others off.

It seems this practice continues in most areas and is, of course, contrary to the DOC14 regulations.

All channels, with the exception of channels 11, 5 and 35 (for which special uses have been allocated by law) are available for any legal use by all licensed users.

Another reader from Gippsland (Victoria) expressed the opinion that truckies should be an exception, and should have the "suggested" road channel, channel 40, as their own. I must disagree with that idea, because this same argument could be used to justify a special channel for tow truck drivers, courier businesses (many of which use UHF), to name but a few.

I say again, the UHF channels are available for all licensed users to utilise.

★ ★ ★

I've also had a few enquiries regarding tips for UHF beginners. My first piece of advice would be, "Buy your equipment from an established CB store". They are always only too happy to explain the basics of UHF operations. All too often, I see new operators who have bought gear, and yet been told nothing about simple matters such as the types of aerials to use, operation of the radio, duplex/repeater useage etc.

Repeater operation seems to be a source of confusion to many newcomers. To check whether a repeater is operational in your area, either consult the UHF Repeater List elsewhere (hopefully) in this mag, or listen to the 'repeater channels' (channels 1-8).

Your radio must be switched to 'Duplex' operation, to permit use of the repeater First, call 'Breaker' if the channel is in use. Otherwise, announce your callsign and request any station to inform you if you are 'accessing' the repeater.

★ ★ ★

There is a lot of new gear for UHFers coming on the market. However, thanks to the sad state of our dollar, any electronics from OS have big price tags.

Sales of radios is slow at the moment, at least to hobbyist operators.

A new antenna seen out and about is a 6 dB mini-colinear, which can be mounted on a vehicle bull-bar via a massive spring mount. It works brilliantly, and I have seen quite a few on vans and cars here in Sydney.

As many UHF enthusiasts are also into scanning, I know they will be pleased to hear about the three new Uniden 'Bearcat' models. These are the 50XL and 100XL (portables), and the 175XL (base/mobile). The construction is very good, and the performance even better. Prices begin at $299, through to $420 — check them out at your Uniden dealer.

★ ★ ★

The rumour from a very reliable source is that Sydney's Western Radio Club is about to fold, possibly by the time this goes to print. Attempts to contact the club by mail have met with nil response. The question now, of course, is what is to become of the Sydney ch 2/32 repeater project?

Obviously it will never come on air as a Western Radio Club venture, therefore DOC must investigate the situation now, and take action to ensure that ch 2/32 becomes reality for Sydney UHFers.

★ ★ ★

Brad Geier, of Bendigo (Vic), has asked me to invite UHFers in or passing through Bendigo, to listen to the Bendigo UHF News. The broadcast commences at 8 pm every Wednesday on channel 16. Latest rig reports, special guests and emergency news are some interesting features of the broadcast.

★ ★ ★

A recent trip to the south-west of NSW illustrated that, in UHF communications, height is might. 477 MHz is fairly quiet around the Wagga-Narrandera area, however by positioning my car on top of Galore Hill (the only place any higher than a mound in the area), I was able to access four repeaters. These were Walbundrie 2/32 (80 km distant), Albury 4/34 and Corowa 1/31 (both 120 km away), and Wangaratta 6/36, at 160 km!

Simplex operations extended up to 200 km to the north. A marvellous place for UHF, it's just unfortunate there are few people active in the area.

★ ★ ★

The 1986 Sydney to Darwin Wynn's Safari rally was held in late September, and UHF CB wqs the mandatory two-way equipment in all vehicles. The backbone of the network was an airborne repeater, using an AWA repeater unit fitted into a Cessna 172. Channels 6/36 were selected by DOC for the event, and the callsign was — what else? — AIR.06!

Communications were rock solid from Sydney until the repeater reached Cessnock, and the average coverage was in excess of 100km during the race. Congratulations are in order to Hatadi Electronics, who organised the network and supplied Royce UHF rigs to official vehicles, and the DOC who were most helpful in approving the repeater.

★ ★ ★

That's all for this issue. Please keep your news and views coming to: The 477 Report, PO Box 358, Granville NSW 2142.

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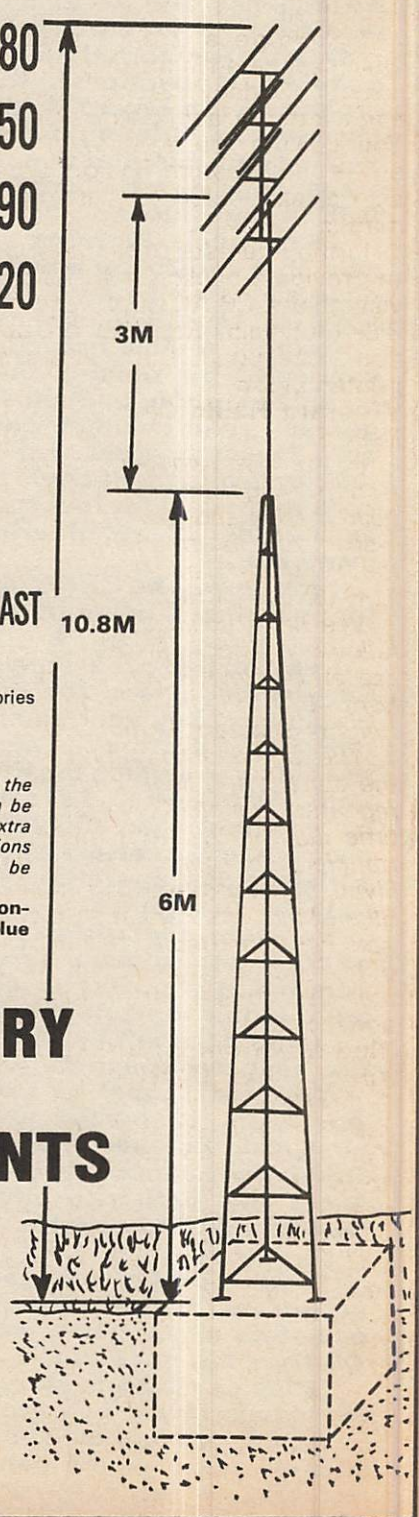
If more height is required the flat plate base tower can be attached on top of an extra tower. 3m or 6m sections available. These will still be self supporting.
Suggested block of concrete 50cm sq 5-1 mix blue stone.



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THE ON AGAIN, OFF AGAIN REPEATER

Regular readers of CB ACTION will be aware of the continuing (if not controversial) saga of Sydney's ch. 2/32 UHF repeater. Certainly, that City's UHF users have put up with the 'on again-off again' repeater, amidst complaints of inactivity from the licensee and the DOC itself.

Following a 2/32 'update', which appeared in the July/August issue's 'Sydney Scene' column, and a letter in last issue's 'Back To You' column, the repeater's licensee — the Western Radio Club — sent a reply to CBA regarding the matter.

In the interests of fair play, and to provide a public forum for both viewpoints, CB ACTION invited the Blue Mountains Repeater Association to respond. Both letters are printed below.

Western Radio Club

Dear Sir,

In the last two editions of CB Action magazine there has appeared false and misleading statements and information regarding the Western Radio Club and the KUR 02 UHF, CBRS repeater.

We bring your attention to the following: The Australian UHF repeater list New South Wales section; 2/32 KUR 02 Kurrajong Heights Western Radio Club.

The above information shows the correct and licenced holder of repeater licence KUR 02. At no time did the Western Radio Club transfer the licence to Mr David Flynn, of the group calling itself The Blue Mountains Repeater Association. For confirmation of the holder of KUR 02 we suggest you contact the Department of Communications, Sydney.

Blue Mountains Repeater Association (BMRA)

It is hard to take seriously a club which, despite having held a repeater licence for three years, has not been able to get a useable repeater on air, let alone keep it there.

Sydney's ch. 2/32 repeater (callsign KUR-02) was agreed to have its operation handed over, or 'transferred', to the BMRA by a majority vote at a general meeting of the WRC in December 1985. DOC, at the time, considered this to be valid, stating that their only concern was to see the repeater become operational.

Five months after the BMRA's repeater came on air, under pressure from the WRC for official confirmation in writing, the Department had to rule that the licence could not be 'transferred' as such, and so the BMRA's working 2/32 repeater was taken off air and out of service.

Might I remind readers that the BMRA erected and commenced operation of the repeater less than a month after 'obtaining' the licence — whereas the WRC, having held the licence for over three years, has yet to establish a workable, permanent repeater anywhere near the licenced site. Hence, the correct references to its on-air reputation as a 'Claytons' and 'Leyland Brothers' repeater, which is how it is known around the band.

Steve Griffin's comments in his 'Sydney Scene' column were in fact most truthful — and this is why they represent the Western Radio Club 'in an unfavourabe viewpoint'. If any members of the WRC were at all active on UHF, they too would be aware that Steve's comments accurately reflect the opinion of all Sydney's UHF enthusiasts.

Isn't it time that DOC acted to end this injustice? How can any group hold a monopoly on a repeater licence for over three years, without ever establishing a useabe repeater?

To put an end to this controversy, to remedy this ludicrous situation and give a 'fair go' to everyone — UHF operators and groups actually committed to getting 2/32 on air — there is really only one fair option.

Why should DOC not cancel the licence held by the Western Radio Club (they surely have grounds enough for that), and start afresh by calling for new applications from any and all interested groups?

The BMRA itself is not concerned with who holds the licence, simply that the long-awaited Sydney metro 2/32 repeater is established once and for all.

Judging from their track-record and past failures in this area, however, it can ony be observed that the Western Radio Club is incapable of doing this.

Greg TOwells
Co-ordinator, BMRA

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27 'BLEG' NEWS

By ROD FEWSTER

What was it that made the last September of CB Action different from all the rest, even the monthly editions of 1977-1981?

Was it the continued over-emphasis on CB radio (which this column is not intended to rectify)?

Was it the fact that I actually found room for a few paranoid aggro ravings amidst my usual two pages of paranoid aggro ravings?

Was it the possibility that the July/August issue might not mention those heroines of herpes, the Wombat Wireless Club Ladies' Auxiliary, (known better in their home town as the "Wombat Wireless Club Ladies' Auxiliary")?

Was it because it was the second issue not to have the ever present tits'n'bums cover?

No . . . it was the first issue to feature "27 Meg News", a column written by some character who can't seem to make up his mind whether his name is John Cameron or David Flynn.

Let's take an in depth look at this "column".

Early in the piece the author dons his Sigmund Freud jockey shorts and does a brief psychiatric evaluation of my writing style. Obviously an avid and regular Queensland Scene reader.

Next he pokes it up the Western Radio Club for no apparent reason. Could there be more to this than meets the eye?

Next he tries to make readers think that he's a "real" CBer by childishly referring to UHF-CB as "Useless High Frequency" (probably says "Good Budgie" on-air as well) and that he's "one of the boys" by intimating that he misses having a bit of a perv on the tits'n'bums which usually adorn the front cover of CB Action.

Next he tells us that the "sixty channel rumour" is really just a "sixty channel rumour" (as if anyone was silly enough to believe it in the first place) while using a mild crudity aimed at fooling readers into thinking that he's a kncokout down-to-earth and tell-it-like-it-is journo.

Next he gives us the lowdown on the portable emergency radios which have appeared on the scene "lately". A really current item, this one, as these rigs hit Australia at the same time as forty channels became legal. As a matter of fact I gave one such rig a write-up back in 1981.

Next he wears his Good Buddy hat and gives a free plug to the leading candidate for the 1986 "Let's-Use-This-Crap-To-Fill-Up-A-Few-Pages-And-Pad-Out-The-Magazine-A-Bit" award, and adds a few extra Good Buddyisms for good measure.

Next he insults our eyeballs with another really up-to-date scoop, telling us that the FCC is about to totally ban the manufacture of 27 MHz linears. Wow!! The FCC did this back in 1981, legally tying up linear amplifier manufacturers so tightly that even licensed amateurs can't purchase a factory-built linear capable of operating anywhere near 27 MHz. Even the manufacturer of kits to modify legal amateur linears for ten metre operation is tightly controlled, and these are only available direct from the manufacturers on production of a current amateur licence. According to the FCC the manufacture of CB linears in the United States is virtually non-existent these days, and they'd have to invade Mexico to find a large-scale 27 MHz linear factory. So much for the "great American heater-hunt".

Next he tries to convince us that he's not really a Good Buddy by telling us that he knows CB operators who use linears, although naturally they use them properly to minimise TVI and then only in the bush during emergencies, and that the RIs allow a fair amount of leeway in these cases. (He must have a pet RI in his pocket. The only one I know would jump down the throat of any CBer caught using a linear, with both feet!!).

Next he waffles on a bit about rigs and antennas, and tells us exactly nothing.

Finally he does the big ego trip by casually mentioning that his job with a multi-national (I'd have thought "multi-cultural", "multi-racial", and "multi-lingual" better adjective myself) company is taking him off to the land of the maple leaf for three years. Unfortunately a recent merger brought about by the 1986 Budget may have changed all this, so we might have to put up with more of his Good Buddy drivel in future issues.

Incidentally, for those readers who don't speak Afrikaans, "blegging" is the art of poking one's finger up one's nose to extract "blegs". (No prizes for guessing what a "bleg" is).

SCANNING AROUND

By JOHN WILLMOTT

With the bushfire season approaching many scanner operators are wondering just what frequencies they need to follow the action if Australia is unfortunate enough to face another Ash Wednesday.

Others want to know the frequencies of nearby brigades so they can be prepared to protect their homes in the event of a local conflagration.

I can't give you every frequency in use in every area but I will try to give an overview so you can get started on identifying those you are most interested in.

NEW SOUTH WALES

In the Sydney metropolitan area and in a number of country cities and towns the NSW Fire Brigade operates on one or more of the following frequencies — 78.010; 78.040; 78.070; 78.115; 78.130; 78.160.

Bushfire brigades do their own thing, with each operating on the local Council frequency or some other frequency obtained for them by their Council.

In the Blue Mountains you can expect to hear local brigades on 72.770 (VL2EW) while at Penrith you will hear brigades through the City Council's Glenbrook transmitter on 173.550 (VL2VF).

Camden comes up on 166.120 (VL2VJ), Ku Ring Gai on 170.730 (VZ2AS) and Warringah's VL2HW can be heard on 171.030.

VL2LV at Liverpool is on 171.120, while Hawkesbury's VL2IC comes up on 170.250.

Around the Picton area you can find Wollondilly Shire brigades on 75.590 (VL2TG). Still on the edge of the metropolitan area, Campbelltown's VL2HA comes on strong on 78.825.

Out in the country you might want to try 74.390 (VL2GA Gundagai), 169.450 (VL2IT Nowra), 1661.20 (VL2SC Shellharbour) or Gosford's VL2YS on 170.400.

Other country frequencies are: 74.420 (VL2HQ Junee); 74.450 (VL2CT Cootamundra); 74.480 (VL2EB Merriwa); 75.980 (VL2AP Yass); 76.880 (VH2BPA Singleton).

Lockhart's VL2CY is heard on 167.170 Tx and 167.470 Rx (according to AMFAR). 491.375 Tx and 496.575 Rx will give you Wingecarribee Shire's VZ2AF, while 165.580 produces Cooma-Monaro brigades.

SOUTH AUSTRALIA

The State's Metropolitan Fire Service (MFS) can be heard in the Adelaide area and in some country towns and cities.

In the metro area the best frequency is 168.820, while in the country you can find them on 168.880.

In all other areas the Country Fire Service (CFS) units come up on their own Council area dedicated frequency or, at major conflagrations, appear on one of the two State-wide channels — 163.120 (Ch2) 163.240 (Ch 3).

The 18 channels assigned for local use are -

4—163.300	10—163.060	16—163.570
5—163.210	11—163.360	17 —163.405
6—163.270	12—163.075	18 —163.510
7—163.090	13—163.165	19 —163.525
8—163.150	14—163.285	20 —163.540
9—163.420	15—163.195	21—162.850Tx 163.540Rx

QUEENSLAND

Something of a mystery to your columnist, Queensland has a large number of fire fighting organisations — the intricacies of which have yet to be explained to me.

Perhaps some knowledgeable reader could provide me with a rundown on the organisation and the use of frequencies.

Meanwhile, try scanning 74.000; 74.030; 74.060; 74.120; 74.135 and 78.685.

VICTORIA

The Melbourne Metropolitan Fire Brigade will be found on 463.150/453.650 (Ch 3), 463.225/453.725 (Ch 1) and 463.275/453.775 (Ch 2).

Outside the metropolitan area the Country Fire Authority (CFA) channels are to be found between 162.820 and 164.170 although other frequencies have been introduced.

The basic frequencies are -

Ch 1	— 163.120	Ch 6	— 163.300
2	— 163.240	7	— 163.330
3	— 163.090	8	— 163.030
4	— 163.150	9	— 163.100
5	— 163.270	10	— 162.970

NORTHERN TERRITORY

Protecting the main towns — Darwin, Alice Springs, Tennant Creek and Katherine — the Northern Territory Fire Service can be heard on 467.750/458.250 and 467.800458.300.

According to AMFAR, you might even hear the Alice Springs unit on 75.500.

The remainder of the Territory is protected on a catch-as-catch-can basis by local volunteer resources under the control of the Bushfire Council.

The Council may be heard on 163.240, 168.325/163.285 and 163.385/163.345.

WESTERN AUSTRALIA

The WA Fire Brigades Board operates between 76.460 and 77.120 while Bush Fire Brigades work one or more of the following frequencies: 77.975; 79.435/78.475; 79.390/78.430; 79.480/78.490; 79.495/78.535; 79.510/78.550; 79.525/78.565; 79.585/78.625; 79.870/78.460; 79.900/78.580.

TASMANIA

Urban and Country Fire Brigades protect the Apple Isle.

The urban brigades are likely to appear on 77.033; 77.150; 77.210; 77.725; and 77.915.

In country areas you should be able to hear something on 76.745; 77.405; 77.435; 77.585; 77.645; 77.975 or 78.055.

Well, that's about all I can tell you. Some of the frequencies shown have been given to me by people who should know what they are talking about, while others have come from the pages of ESG Frequency Registers and a few — very few — from the AMFAR microfiche.

If you find anything wrong — or anything missing — in the above frequencies please drop me a line at GPO Box 1200, Adelaide 5001, South Australia.

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HAPPY BIRTHDAY LCN 02!

On September 24th, 1983, a group of twelve UHF radio enthusiasts met at Ravenswood to discuss the improving of UHF repeater coverage in the north/north eastern area of Tasmania. Little did those eleven men and one woman realise what they had set as their goal; the dealings with government departments, members of parliament and the business people throughout the state, the kilometres of travelling, the hours of meetings, the pages upon pages of correspondence and the mammoth money raising project, as well as the great disappointments, that all led to what has been called the best repeater not only in the state but amongst the best in the country.

On that afternoon, a steering committee of six under the leadership of Malcolm, TAH451, was elected. This committee then set out to spread the word — country meetings were arranged at which the committee outlined what they could do if there was sufficient support and finance.

After another general meeting of enthusiasts was called in November, 1983 and ideas gathered from country meetings, committee meetings and the general public were presented. At this meeting it was decided to go ahead and attempt to purchase and relocate the already existing 2/32 repeater being operated on a hill just out of Launceston, but with very little coverage.

Already many experienced users had run tests from mountains around Launceston and it was decided to aim at putting a repeater on Mount Barrow. Hours more were spent on testing and with a committee now elected to go ahead with correspondence, fund raising and organising for the relocation of the repeater, a diplexer was purchased and trialled on the existing 2/32 repeater.

Prior to Christmas 1983 permission was received from the Department of Aviation to conduct a seven day trial from their building on Mount Barrow. Very late on a cold and wet night two men completed the temporary installation of the repeater and, we thought our ambitions were all but achieved when we found that the coverage was very good. Country areas were now linked with city users. We all talked and talked and talked some more. Money was still needed and more donations were sought so that we could purchase the remaining equipment still on loan from the previous owner.

At the end of our trial, a submission was forwarded seeking permanent tenancy, which after months of correspondence and visits to government departments, phone calls, and discussions with members of parliament was refused. We sought tenancy with other parties, both government and private, on developed sites near the summit of the mountain but those who answered our letters and submissions woud not allow us to operate from their buildings.

Mount Barrow offered us accessibility all year round, AC power, buildings already established, and a road which vehicles could use to the site. After many more months of applying and appealing to government departments we were beginning to think that we had been too ambitious.

Our joys of December 1983 had turned to heartache. All the time UHF users were becoming more dissatisfied with the repeater now back in its original position and restless since they may have put money into a project which would never succeed.

On the 9th October, 1984 we completed the purchase of the repeater, and became the proud owners of a repeater and diplexer but with nowhere to go!

Further tests were carried out to try to find another suitable area as Mount Barrow seemed to be a "mission impossible." More miles of walking as committee men with their gallant helpers spent yet more weekends trying to find another site. In February, 1985 we applied to the Forestry Department for a lease of a site on Mount Arthur. Again, Department of Communications approval was sought. A shed would need to be built, extra finance would be needed, as gone was our AC power and, we would require solar panels, batteries, antenna, cement and ... but we were not going to be beaten now. Surely we must be able to achieve our goals. A helicopter was hired to transfer the shed and equipment to the prepared rocky site on Mount Arthur. After several attempts having to be cancelled due to poor weather conditions we thought as we saw the shed being lifted from the local football ground that the time had come.

But all was not well. Within minutes of take off the helicopter returned, minus its load. Insufficient time had elapsed for the pilot to have reached our site, let alone returned! Where was our gear? Due to changing wind conditions he had been forced to leave our gear in the cow paddock belonging to a local farmer.

Another larger helicopter was hired in an attempt to complete the task at a later date. This time the shed and equipment reached the group of men waiting on the summit of Mount Arthur.

More working parties trekked the several kilometres to our site during the following weekends to complete the shed and the installation, until at last, on the 9th November 1985, two years and two months after the first meeting, the president, watched by a team of extremely cold and tired committeemen and other workers, turned on the now relocated 2/32 repeater and successfuly made the first transmissions. More technical adjustments had to be made before a tired but joyous party set off for home. Three men had to return that night to make further adjustments. We are all now much wiser, the owners of more grey hairs, and $10,000 sooner for the experience but a very happy committee.

Now, after having been on air for 12 months, we are delighted with the repeater. Not only has it been a source of pleasure and relaxation for many members and non members of the Association but has also been used in the case of emergencies.

We will still need the support of all our users if we are going to be able to continue this service to the community, as the upkeep will cost a considerable sum of money each year, but we are hopeful that all operators will continue to support the best repeater in the land.

CB Notebook

CURING MOBILE RADIO NOISE

By CHARLES SILVESTRO

So now you've had your CB running sweetly in the car for a while — but what's that awful buzzing sound when you rev the engine?

Ignition noise is one of the most aggravating problems to the enthusiast.

It is equally as frustrating to the technician trying to stop the maddening noises emanating from a gaggle of mysterious black boxes under the bonnet.

There are three basic types of, what is collectively called, ignition noise:

1. True ignition noise — a "popping" sound, generally present regardless of engine speed.
2. Generator or alternator noise — a "whine" type of sound, increasing and decreasing according to engine speed.
3. Accessory noise, that momentary 'pop' sound when a switch is actuated, or accessory motor noise — when the wipers are activated for instance.

Many have tried, and many have failed, but there **are** ways to reduce these problems.

Interference can enter the radio through its power line or through the antenna. The days are long gone when poor shielding in the receiver was the cause of ignition noise. Console yourself with the fact that, if you have some ignition noise, it is probably not because your set is badly shielded.

The most important part of your radio installation is your antenna. It made sense to get the SWR right the first time didn't it? You also made sure it was properly grounded — or did you?

SWR can still be checked on a poorly grounded antenna system and can pass with flying colours, because after all, it is basically a check of how much RF energy is sent down the transmission line as compared to what is reflected back. Unless the ground to the antenna is completely missing, you would still get a reasonable reading. RF noise is not as kind. It will see a poor ground as a golden opportunity to radiate.

It is fairly easy to check if the noise from your $500 "top-of-the-liner" is entering through the antenna — disconnect it, then plug in a dummy load, and presto if the noise disappears then you are on your way. If the noise remains, first check that everything that goes to ground is in fact grounded. The antenna base must have a good metal to metal connection to the body of your car. Try running an extra ground wire from the case of your CB to the body of the car.

If the noise remains, then chances are that it is being passed through the wiring harness and these wires are acting as a giant noise radiating antenna, surrounding your poor little whip aerial.

The only way to stop this type of noise is to suppress it at the source. Finding that source can, however, be a somewhat daunting task — prepare for some frustration! Trial and error is the best method. Switch off the engine and start turning things on and off until you find the troublesome party.

If the noise is still present when the engine is running, then it is most likely caused by the spark plugs, distributor or voltage regulator systems. If the noise is a whining sound, increasing with engine RPM then it is most likely the alternator.

There are several products available to eliminate noise once you have found where it comes from.

Check with your local CB shop — as a rough guide, the feed-through type filter will prevent most noise caused by the charging and distribution system, and an alternator type filter will block out the whining or buzzing sounds.

If you have done all this, and managed to reduce most of the noise you will probably be quite pleased but, read on, there's more.

Power line noise can be suppressed by adding more filters. Hot line filters are readily available. These are much like a small transformer which is inserted in the power line to your CB, and a capacitor, which is connected on the ignition coil.

Another kit available in some shops consists of shielded cable and a feed-through filter. The shielded cable will help stop unwanted noise getting in through the power line to the set when it has to pass through the birds nest of wires under the dashboard.

In all cases, follow the manufacturers instructions to the letter. Steer clear of expensive devices that claim to be "the end all of ignition noise". You will be very lucky to eliminate all the noise emanating from your car, and you will probably never stop noise entering the antenna from a source outside your car, such as when a motorbike pulls up next to you at the lights.

The filters mentioned above are the basis for noise elimination and anything more could possibly downgrade the performance of your CB. Of course, if all else fails — well, you could always buy a new car!

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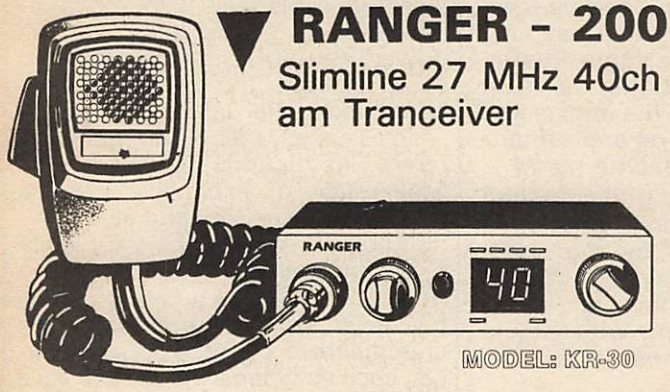

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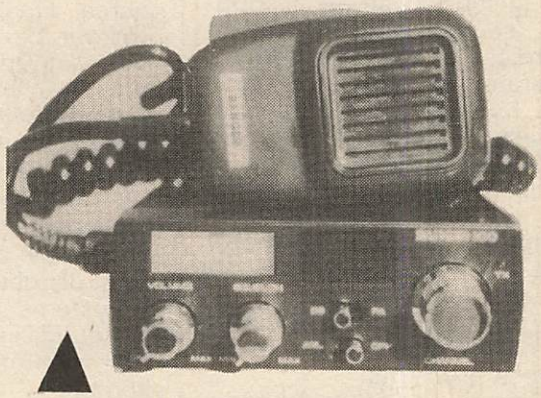

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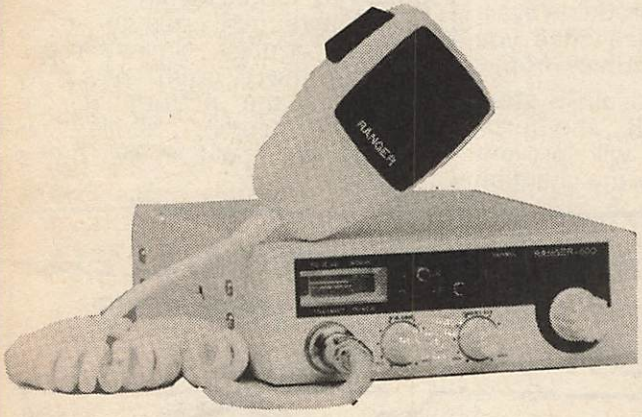

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WHICH UHF RIG TO BUY?

FIRST OF TWO PARTS

Compiled by DAVID FLYNN
Principal photography by Greg Towells

Shopping around for some 477 MHz gear? Here's an independent user-oriented comparison of rigs, to get you off to a good start.

magine, if you can, that one ning on UHF, your call on ch. 11 ffected by something more than ospheric ducting. It is, instead, eezed through a void in time it- , reaching back to a UHF CBer m the relatively lonely days of -'78.

How would he react, as you tried tell him that you were a fellow husiast from some 8 years in future — as you attempted to lain what UHF CB is like, in our e?

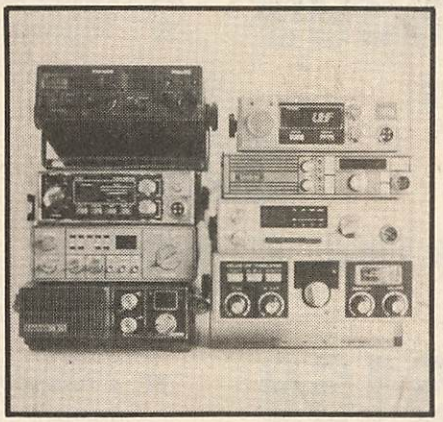
Would he laugh when you talked a network of over 100 repeat- , in city and country areas oss the continent? Deride you, en you tell him that there are v over a dozen models of 477 z rigs to choose from, and that can even buy them from the al Tandy store, under the 'Real- c' label?

There'd surely be a lot of disbe- if you said that we even had a ge of 40 channel handhelds ilable, and others with fewer nnels and lower power.

You see, things were indeed dif- ent in those days. Life, for the Fer of 1978, was much simpler.

For a long time, such as in the of our friend, buying a UHF CB io was a lot like Henry Ford's st famous car. Either you ght a black Model T, or nothing. his instance, the Model T came a plastic case with a label that d 'FM320', and a cicada sound- its mating call with every chan- change.

From early 1978 to mid-'79, the lips FM320 had an enviable 100 cent market share — until a ond rig — the Sawtron 880 — de its quiet but long-awaited de- . Another year passed, and the



new Apollo AP400 defined its own middle-ground amidst the competition. Then came Electrophone's highly popular and equally successful TX470.

Since then, it seems no-one has looked back. Each of these first four radios has been superseded, out-dated, while even more join their replacements. As time passes, the range extends even more, the choice of 'which rig?' becomes harder.

You could easily spend hours chasing rig reviews, brochures, write-ups, advertisements, even as you attempt to simply survey what is available.

That is the purpose of this article. To present the relevant and useful information, for the user, on each 477 MHz CB that might be available. For purchasing a second rig for car or base, or even a first-time onto UHF, we hope this report will be useful in saving some time and effort.

It is **not** a definitive 'Rig Review', and certainly has no pretentions of being a technical evaluation. It is user-oriented, slanted towards the operator, who can then use this compilation of data to start narrowing down choices.

The participants in this article are all avid UHF CBers, with a variety of uses for the band. Their different opinions, their likes and dislikes, all help to present what we hope is a balanced comparison of radios, from many viewpoints.

'Comparison' is almost the operative word — of features, layout, basic on-air qualities. There are no prizes for 'Top Rig'. We did not set out to praise 'Brand A' as the best rig, 'Brand B' as value-for-money, or even recommend that 'Brand C' be used as a doorstop.

This is an objective comparison, compiling observations and information into a relatively concise guide. The on-air aspect of each radio were evaluated through a series of tests, using the same antenna and power supply at the main site, and different test stations under a variety of receive conditions. Opinions of others, using the radios under review, were also sought.

We hope that you will find, on these pages, an easier path through the maze, to help the potential but bewildered buyer. This is also an independent article, which has drawn upon to some extent the findings of earlier 'CB ACTION' reviews of many of the radios in question. These reviews are listed at the end of the article, for further reading.

And, by the way — if you **do** contact our friend from the past one night, and he gives you a QSL address, please send him a few recent issues of 'CB ACTION'. I'm sure he'd be overjoyed to see the exciting progress of UHF CB since those earliest of days.

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477 MHZ FEATURES

Being a simpler medium than HF, most of the features on UHF radios fall into the category of operator convenience, sometimes sheer trimmings. But the increased variety of models has brought back popular features, and introduced new ones.

The comparison table reproduced at the end of Part 2 of this article **(table 1)** provides an at-a-glance analysis of each rig, with appropriate footnotes.

S-METER

The very first reaction of most UHFers was that a meter was useless for FM. The mode is not like AM, where a signal slowly decreases as noise factor increases. Nor like SSB, with voice peaks and percentage modulation being the key.

Apart from a bit of noise towards the fringe of reception, most FM could be described as 'crystal-clear', pretty well regardless of range. To all appearances, one station down the street and another on the other side of the city can possess identical signals.

So the common knowledge was against S-meters. If you *had* to have one, then make it digital, please. A row of LEDs (light emitting diodes) was more interesting than a plain old needle-meter, any day.

But . . . with more experimentation by UHF operators, newer high-gain antenna and an increasing use of beams, a strong lobby has developed in favour of the analogue moving-needle meter.

For definite 'go-no go' tests and readings, a digital meter is sufficient. But, in antenna comparisons, nothing comes close to an analogue S-meter for accuracy.

TONE CONTROL

This was a feature appreciated by most operators involved in this comparison. Only five rigs to date have this — the Apollo AP400/AP400R, the Tiger (both now out of production), Sawtron 990/999 and the new Philips FM620.

It was generally found that the tone was left at minimum (bass) setting, to reduce natural 'hash' and high-pitched signal 'hiss'. Even with the variable control of the Apollo/Tiger (as opposed to the pre-set switch levels of the 990, 999 and FM620), there was a tendency to emphasise signal noise at even the mid-range level.

RF GAIN

Quotable quote of the month came from one member of our review team, who tactfully described this control as being 'as useless as an ashtray on a motorbike'!

Remembering the nature of FM signals, it is easy to see why an RF gain control can be considered unnecessary. The only practical use for it seemed to be in reducing adjacent channel interference (less enlightened people than UHFers call it 'splatter'!), from a very nearby station. Some operators have a really hard time with this, if they live too close to a repeater.

SQUELCH DELAY

This feature was, like the RF gain, introduced to UHF CBers on the Apollo rigs. Designed to compensate for choppy mobile signals, it delays the mute from closing for a brief period, in case it is not the end of a transmission but merely a temporary drop-out.

The same control also appeared on the ill-fated Pearce-Simpson Tiger. Most operators found this feature to be convenient for mobile operations.

DIMMER

This is one trimming that the entire review team — in fact, everyone we spoke to — favoured. Rarely used for base stations, but a gift for mobiles. At night, on a long drive, the burning glare of an LED readout can be irritating to say the least. In fact, without a dimmer, the high-intensity LEDs of the Philips FM620 could well be a bit of a pain.

Five rigs, to date, have *some* dimmer facility. The Tiger alone has a variable dimmer, while both Apollo and Leopard both employ a simple 'DIM' switch. This was preferred over the variable control — it occupies less room on the front panel, and is simpler to operate. As a side-note, the dimmer of the Apollo AP-400 was replaced by a 'DUPLEX' switch on the AP-400R. The Sawtron 999 also has a single pre-set dim level.

The Sawtron 990 also has dimmer facility — typically Sawtron, in that it's automatic. A wire lead from the radio is connected to the vehicle's lighting system — when the lights go on, the display dims!

SCANNING & REMOTE CHANNEL CHANGE

Some rigs have the ability to step through the channels like a scanner, locking onto a busy frequency. This is, at present, a function limited to radios with electronic channel changing — the Philips FM320 and FM620, Royce TS-133 and Sawtron 999. Remote channel change — great for mobiles — is featured only on the Royce and FM320.

This feature — using channel change up/down buttons on the microphone — was in fact greatly missed on the FM620.

As to scanning — to be fair, we must point out that the FM320 never *officially* had this ability. But the design of the 320 lends itself to a number of useful modifications, of which the scanning was most popular. And so easy that **anyone** could do it. (Well, almost anyone. I'm told that our long-suffering Editor's mate Fred rigged one up, but it only locked onto the *vacant* channels!)

There were, in fact, some very sophistocated scanning mods fitted to the Philips, with priority, selectable channel lock-out and so forth.

Both the FM320 and Royce TS-133 simply scan the entire band. A variation on this is the FM620, which can *also* scan the eight repeater channels — and, at the same time in either scan mode — keep an ear on the nominated (NOM) channel, if desired.

The Sawtron 999 offers not only band-scan, but also scanning of up to 40 user-selectable memory channels (again, with or without priority watch). These can be simplex or repeater channels.

REPEATER ACCESS

The ability to operate via repeaters (commonly termed 'Duplex') is standard to all UHF CB radios currently produced. Older models may or may not have duplex, depending on their age. Most FM320s were released without such, but buyers then had the appropriate mod installed. The Sawtron 880 was never released with standard duplex, while the Apollo AP400 (simplex only) was superseded by the AP400R (duplex fitted).

The Sawtron 999 adopts the most versatile approach yet. Via the keypad, the operator can program any frequency as a 'Priority' channel, again accessed at the touch of a button. This is very easily set, and quite versatile.

Regardless of which particular radio features such functions, everyone we spoke to applauded the trend towards such resets, especially those set by the user himself.

MEMORY CHANNELS

It's been a long wait, but worth it. At last, a UHF CB rig that has memory channels. For more years than you'd like to think, this has been a standard feature on amateur rigs — a bank of five or ten 'memories' to store commonly used frequencies — call channels, repeaters, etc.

Now, the Sawtron 999 offers a whopping bank of 40 memory channels, complete with the ability to scan these channels for activity. Anyone with an amateur VHF/UHF rig, or a scanner, can appreciate how much easier life can be made for the channel-hopping 477 MHz enthusiast — if only you can afford the 999's price tag!

REPEATER REVERSE

Here's another one borrowed from the hams. In the strictest sense, repeater reverse enables an amateur to literally swap duplex frequencies on the rig. That is, to transmit on the repeater output, and receive on the input.

It is particularly useful for checking whether you are able to use simplex mode or whether the repeater is still needed.

CHANNEL RESETS

One of the best features of the F320 was the facility for automatic, one-touch return to either the call channel or another nominated frequency. The 'NOM' switch was set using a diode matrix, and was great for fitting a favourite channel — local repeater, simplex net, emergency etc.

Of course, the later model FM320s had this position replaced by the repeater switch — but it's nice to see the NOM returned in the FM620.

Changing the nominated channel on the 620 is even easier, as it simply involves resetting a miniature dip-switch mounted inside the case.

No wonder, then, that other manufacturers began to look at this feature more closely. The Leopard has a reset to ch. 11, the call channel. Curiously, the channel readout disappears when this is activated, an LED indicator above the switch lighting up instead.

The newly-released Royce TS-133 expands this function considerably. Automatic selection of either the emergency, calling or highway channels (5, 11 and 40) is available to the operator.

The Royce presents this feature in a slightly modified form — it will only receive on the input. With the reverse switch activated, transmission remains on the input - effectively 'input simplex'.

As it is common to check repeater inputs to determine if a station is within simplex (direct) range, this feature falls into the category of 'real beaut'. It may even encourage repeater operators to check inputs more often, being less cumbersome than the old spin-the-channel selector game, especially when mobile. Good thinking, Royce!

REMOTE MOUNTING

A great tradition of the Sawtron radios. The entire family — 880, 990 & 999 — can have the control 'head' of the radio — bearing knobs and speaker — separated from the electronic 'guts', and connected via an interface cable kit. This means that, in mobile use, the larger bulk of a Sawtron can be remote-mounted under a seat or in the boot. For base stations, if you're really keen, it could even be in the roof or in a water-proof casing atop the antenna tower, to reduce power loss through a lengthy cable run.

FRONT-MOUNTED SPEAKER

Chalk up another one for the lads at Imark. All Sawtron radios also have a speaker built into the rig's front panel — not on the top or bottom of the case itself. Electrophone have seen fit to borrow this idea for their new TX472. This is used to its greatest advantage in base stations, as the environmental noise in mobiles can often drown out the smaller, less powerful front-mount speaker.

RIG RUN DOWN

Apollo AP400, AP400R

The early Apollo AP400's went through some 'teething troubles' that, when rectified, helped them earn a solid following for what many saw as simply a 'very good radio'. It was the third UHF CB on the market, aimed clearly at the middle-ground. Not a 'gee-whiz FM320, nor a spartan 880, but a basically pleasant radio. Now out of production, the Apollo series is only available second-hand.

The early model AP400's came in for criticism not only for those first niggling problems, but also for insufficient suppression of ignition noise. This, again was solved, and remains a fault easily rectified.

There is really very little difference between the AP400 and AP400R. As you can probably guess, the 'R' denoted repeater access, the 'Duplex' switch replacing the dimmer switch of the AP400. The 400R also included an external speaker socket — an obvious omission from the first model.

On the outside, all else remained the same. A large rig, bigger than any other UHF CB to date (and a fair few SSB rigs, too), the Apollo could have been easily mistaken for a 27 MHz set. The whole styling was reminiscent of a HF radio, even to the inclusion of an S-meter and an RF gain control.

This, like the very size of the Apollo, was a matter of personal appeal. Some CBers were better able to relate to the familiarity of the AP400, compared to the 'busy' and 'plastic' look of the FM320 and the sparseness of the Sawtron 880.

For the same reason, others were repelled by the similarity to a 27 MHz CB. It was almost a 'throwback' to HF, a genetic accident if you like!

The front panel is quite uncluttered, even considering the high number of controls. The channel readout was large, and — a first for the 477 MHz rigs — used green LEDs, as opposed to red, which tend to 'wash out' in direct sunlight and can be harsh on the eyes. Both are points in the Apollo's favour.

There are also three push-buttons — one for power, one for dimmer/duplex (depending on which model you buy), and a 'squelch delay', again a first for UHF.

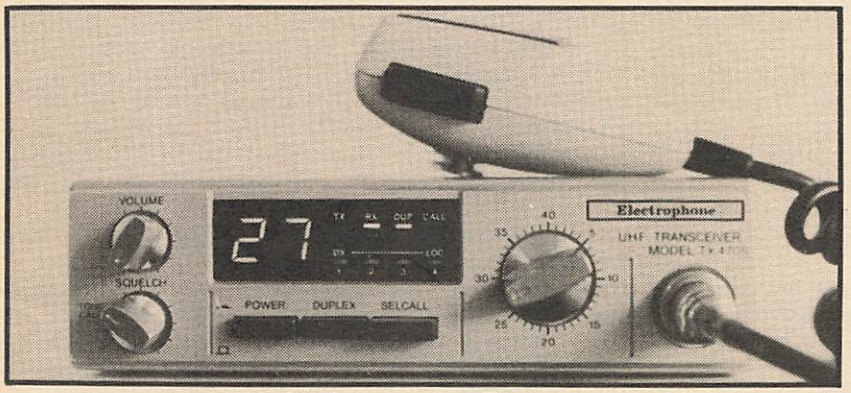
The large S-meter is very easy to read, but its mere presence was questionable to some. Was this, like the RF gain, a mere carry-over from HF? It was sometimes branded a psychological trick to relax 27 MHz operators on this new brand, by providing familiar surroundings.

All controls have a firm feeling, and are large enough to be used comfortably — especially the channel selector. The mike is

mounted on the right-hand side panel — not ideal, but we've all seen worse. The mike itself? Large, again a copy of the common HF design, but it all depends on what the individual prefers.

The receiver was sensitive, audio clean and very natural. The in-built speaker gave clear and loud audio, with plenty of 'volume' left to spare. We couldn't imagine normal environment so noisy that the Apollo couldn't be heard.

Likewise, the transmitted signal gave evidence of plenty of voice-power, without too much bass or treble. Natural, pleasing to the ear. It was agreed by all that, except for the rig's sheer size, and having eliminated noise supression problems and other minor faults, the Apollos would make good mobiles, if not base rigs.



Electrophone TX470 Series

As the fourth UHF CB to appear on the market, and backed by a team that knew they had a good product, the TX470 series quickly found its own niche in the field. It became perhaps the most popular UHF radio in Australia.

Certainly, the TX470s are attractive rigs, and have undergone no cosmetic changes in three incarnations (as the TX470, 470S and 470T). The styling is clean and modern, relatively slim, with a 'brushed gold' colouring that is subdued but effective. Right from the start, our review team gave it a high ranking for looks, on par with the Sawtron 990 and the neat little Uniden/Realistic models.

Some comment was also made about the same appearance and layout being shared with its 27 MHz cousins, both AM and SSB. 'Nice to have matching radios', someone said.

The controls are minimal. Rotary knobs for volume and squelch, towards and left. Large red LED channel readout and digital S-meter, channel selector has both good size and solid 'feel'. The mike is situated on the front panel, right-hand side, making the whole design very effective for mobile use. Below the display area, three push-buttons — power — on-off, duples and selcall, all with corresponding LEDs above.

The microphone nicely rounded and comfortable to use, and fairly sensitive. There were some troubles in the past with the PTT switch, some claiming it was not as durable as it could be.

According to Standard Communications, this was caused by a fault in a single-batch of mikes. And, for the record — I am requested to report that the cream coloured mikes are greatly preferred to the black ones available at an earlier stage.

The practice of inscribing channel numbers around the perimeter of the channel selector, later taken up by the Leopard, was first seen on this rig. Many operators admitted that they rarely used this feature, while even more claimed it to be invaluable in 'homing in' on a desired channel.

What difference, the 470/S/T versions? The changes were really an evolution, being minor adaptations to meet the current market environment. The TX470S was mostly a 470 with easier provision for adding the selective calling option, carried over to the 470T. This is visible in that the S & T models have a 'push-for-tone call' feature built into the squelch control.

The TX470T is also designed for an up-grade of sorts — to having two 'private' commercial frequencies fitted, in addition to the 40 UHF CB channels. These must of course be allocatd by DOC, and the 470T circuitry requires that they be between 469.2 - 480.4 MHz.

Once done, a transmit time-out timer is fitted, and a 'dual-watch' capability that enables you to monitor a business channel while listening to the UHF CB frequencies. It is, in reality, a single radio that combines UHF CB and a basic business two-way system. In this form, it is re-titled the TX480. The TX480 is still available in its final form, even though the TX470T is now redundant.

With so many of the TX470 series around, it is little wonder they are so easy to collect secondhand. Their received audio was felt to be good, with clarity and a mid-range-/treble response. Likewise, transmitted audio has treble content, but it is up to scratch, being true and natural.

Electrophone TX472

Anyone who has kept an eye on the advertising and promotion of the 470 series will have noticed a trend away from the traditional 'CB' market, and a lean towards the radios as used by businesses and farms. The Electrophones could hold their own even on 'commercial' sales alone, so great is their penetration into this field.

The TX472 is the ultimate recognition of this. Gone is the established 470 'look' — the 472 is rugged, no-frills two-way radio. The brochure doesn't even mention CB — instead, the TX472 is a 'UHF-FM two-way transceiver', offering 'increased productivity through better communications'. And it means it.

Appearances — solid construction, a 'work-horse' radio, even if it did strike some as being old fashioned'. It probably won't sell on fancy looks — quite the opposite, it reminds one of the functionally sparse Sawtron 880. After all, the 'working man' wants performance instead of pose, right?

Microphone is still the same, and in the same sensible location. Above, three push-buttons — duplex, and (for selcall use) mute/call.

After that, only the basic controls — volume, squelch, channel selector. A large front-mount speaker gives suitably 'solid' audio, the transmitted signal also up to scratch.

Another change from the 470s is the multi-position 'snap-lock' mounting bracket, akin to that of the Sawtron 990.

Over-all impression — Electrophone aren't pulling punches for the commercial market with this one! **TO BE CONTINUED NEXT ISSUE**

CB IN THE OUTBACK

BY ROBERT MAYHEW

In Don Stewart's "OUT WEST" column, he mentioned receiving a letter from a fellow Sandgroper, together with a description of a trip along the Canning Stock route.

We thought that the report on the trip would interest other CBers, and, as they author Robert Mayhew says, "is a reasonable testimony as to the effectiveness of 27 MmHz SSB CB radios in the vast outback regions of Austrlaia."

A BRIEF HISTORY OF THE CANNING STOCK ROUTE

Early this century, East Kimberley graziers proposed that a stock route from Halls Creek to Wiluna was needed to bring their cattle down to the markets in the Eastern Goldfields.

The use of Derby had been denied them because their cattle were infected with disease, Pleuro Pneumonia.

In 1906-1907, the then government, under Premier Sir John Forrest, appointed surveyor A. W. Canning with H.S. Trotman as his second in command, to explore the map sufficient watering places for such a route.

After having completed the survey and a favourable report submitted, the government approved the proposition and a well sinking party was called for. Canning was appointed to be in charge and once more he chose Trotman as his second in command.

In May 1908 the well sinking expedition of 26 men left Wiluna with 70 camels and equipment for construction of the wells. The party arrived at Halls Creek 20 months later.

The first mob of cattle were brought down the stock route in 1910 and the route was not used again until 1929. It was last used in 1959.

Some great names and very colourful characters have emerged from those early days.

Today, most of the wells have since caved in. Last year a group of historical enthusiasts with a small contingent from the Army reconstructured Well No. 26 as a memorial to Canning and Trotman and to the many other famous people associated with the stock route.

A FWD vehicular track now traverses the route from Halls Creek to Wiluna and many people such as group expeditions and scientific parties are venturing along its 2000 kilometre run.

A magnificent history of the Canning Stock Route and other great achievements by Canning and Trotman are given in the wonderful book written by Eleanor Smith, The Beckoning West.

On the 6th July, 1986, my companion and I departed Port Hedland, bound for a three week excursion out to, and down the Canning Stock Route.

The Canning Stock Route traverses the Gibson and Great Sandy Deserts in Western Australia. All that remains today is simply a chain of mostly caved in wells spaced over a distance of over 2000 Kilometres from Halls Creek in the Kimberleys in Wiluna in the South.

Our route took us firstly to the township of Newman for refuelling. From there to No. 24 Well on the Canning Stock Route, then south along the Stock Route to Wells No. 9. From that point, across to Glenayle Station and on into Wiluna, MeeKatharra and home via the inland Murchison and the towns of Tom Price and Wittenoom.

While driving, my companion and I left our radios open on channel 16, just in case we encountered any skip. The set was turned on again at the end of each day when we made camp and up until the early evening.

On our way into Newman the CB began to splatter. Presently two vehicles passed by heading north and I soon found the source of the signal on AM mode. Before long I had established contact and found that I was speaking to one of the Black Swans CQDX Club members from Rockingham. They were heading towards Nullagine. I told them where we were headed and we exchanged all the good numbers and continued on our way.

After taking on fuel at Newman, we headed east on the Jigalong Road and made camp. The next morning we encountered very strong easterly winds and the usual accompanying dust as we made our way towards Balfour Downs station. Lunch time found us at Old Talawana. From there we joined the Talawana Windy Corner track. This track has at the beginning of it, a drum with a plaque, on which is marked the distances to various other outback places such as Alice Springs and Warburton Mission. This track is one of several made by Len Beadell and his Gunbarrel Road construction party. Len Beadell has written a number of very good books about his outback experiences.

It wasn't long before we sighted our first sandridges away to the left. Soon the track started winding through these very red sandhills and magnificent groves of desert oak. A little further along we came across Rex Ellis and his Transcontinental Safari, which consisted of four vehicles with a party of tourists from Victoria on board. Introductions and handshakes soon followed, along with much comparing of notes. After about an hour we bade farewell and continued on our way and soon found a suitable clearing in the spinifex where we made camp.

Our next day in the desert dawned with a leaden sky with constant drizzle, and we drove all day with heaters on, as it was so very cold.

We made camp that night in a dry creek bed at the foot of the McKay Ranges. Our distance east from Newman was about 450 kilometres. We were fortunate that the rain had stopped and we were able to gather some dry wood for our camp fire.

It was abot 1630 hrs when my transceiver burst into life with a strong signal coming in from Carnaar-

von. The voices were those of some local people communicating with each othr in the town, and they were apparently unaware that their signals were being picked up nearly 1000 kilometres away to the north east. I was very eager to make contact with them while the skip lasted, and I managed to reach one chap with the call sign of Tango Hotel 24, and handle of Ted. We had a very brief conversation as my signal faded from him soon after. I continued to try and reach them and very soon had a much better QSO with a young woman who had been monitoring my previous call. She gave me her call sign and handle as simply "35, Kristine," and she said that my signal was quite clear at times. The skip started to fade but she said that she would listen out for me on the following afternoon.

The next morning we pushed on out to Well No. 24 but alas, no skip at all that day or night.

On the following day we headed down the Stock Route and towards lunch time I heard some good signals coming in from the north west and from Perth, but at the time I was negotiating a very rough section of track. We finally stopped for lunch at Well No. 22 but the skip by this time had diminished.

For the next two days we crossed numerous sandridges and passed through many lovely forests of desert oaks. We later visited the south west arm of Lake Disappointment, a vast, brooding and lonely place without any horizon — only mirages. While preparing to have some lunch, a brief period of skip came in from the Northern Territory and Queensland, and I tried a little DXing without any success. I feel sure that had we stayed where we were for another hour or so, I would have eventually reached someone, especially with nearly 2000 square kilometres of salt lake stretching away to the north east.

After taking a few shots with the camera, we moved on up to Terrace Hill where we explored, looking for signs of Aboriginal occupation. We made camp at this spot beneath a stand of oaks.

The next afternoon found us at Durba Springs after heavy going, in possibly some of the biggest sandridges of the trip.

Durba Springs is a lovely oasis situated in a gorge of high cliffs. There are pools and tall red river gums and a floor carpeted with couch grass and many species of plant and bird life.

We gave ourselves a two day rest from driving, washed our dirty clothing and equipment and explored this very scenic place.

After our rest at Durba, we continued on our way, with the driving becoming much easier.

Later in the day I made contact with a chap with the call sign of simply "841". He was very interested in the trip we were doing and wanted to get to me. He had someone else on the side of the number of 920. By the time 841 got back to me, the signal strength must have faded — perhaps these two people will read this story. We were at this time in the vicinity of Well No. 15.

We pressed on, and later in the day stopped on the crest of a big sandridge. It was at this point that explorer Ernest Giles crossed, on his way back to Central Australia, and wrote of this piece of country" . . . the region is so desolate that it is horrifying even to describe".

On the next day we stopped for lunch at Well No 13 which is situated in a pretty glade of mulga. I had no sooner turned the engine off when the skip came crashing through the speaker. This time I had a brief but very clear QSO with WA20 (Terry) in Geraldton. At the same time a five vehicle party from Victoria drove into the little clearing. They had travelled down, from the Red Centre via the Gunbarrel Highway and were making their way to Hall's Creek.

We continued south and a day later stopped at Well No. 9. It was here that Sir John Forrest and his party were attacked by natives. The party built a stone shelter, the remains of which are still there.

From this point we left the Canning Stock Route and headed South East towards Glenayle Station.

On the following day, at about midday, I reached a chap in Albany, with the call sign of WCL498. The skip was at that time a little intermittent. I, however, managed to give him our geographical position and a few details. A short while later and at about 60 kilometres east from Wiluna, I had by far the best QSO for the trip. A base station in Pemberton, WAV969, handle, Don. We conversed for at least half an hour with good signals at each end. I have since sent him a card with details of our trip.

We eventually reached the town of Wiluna, a once thriving gold town that boasted several hotels. The little that is left today, I found very depressing.

A few kilometres out of town we made camp in a very pretty stand of river gums. The next morning we drove on the Meekatharra, a much brighter town, situated on the Great Northern Highway. From there we headed for home through the very scenic inland Murchison and the Hamersley Ranges.

Summing up, it was a very enjoyable trip indeed. I was very pleased with the performance of my 27MHz rig, especially with the skip cycle supposedly at its lowest ebb. My companion chose to leave the DXing up to me, although when he had his set on it picked the same skip signals just as clearly as did mine.

I must mention that, out of the six other parties of adventurers, at least half the number of vehicles were equipped with 27MHz SSB rigs. Out of the 25 vehicles that we encountered during our trip, about three were equipped with long range emergency RFDS rigs. I am by no means knocking the latter. They are in fact a very worthwhile radio to have with you when considering any outback excursion — the mere press of a button can summon help in an instant. These sets can be hired out for a small fee from various communications outlets. I do feel however that our 27 MHz rigs run quite a close second, plus the added enjoyment of reaching other operators who are equally as keen.

DIY BASE ANTENNA

By HARVEY EDWARDS

This article describes the construction of a omnidirectional half-wave antenna for HF CB use that costs less than $4 to make. It also has the advantages over more common long antennas of not having unsightly radials, and also being almost unnoticeable when installed on the external wall of a house chimney. It has an angle of radiation some 10 to 20 degrees lower than a 5/8 antenna.

This antenna is a re-dimensioned version of the popular "Slim Jim" used by amateur radio operators for VHF. It uses only an eight metre length of 300 ohm TV ribbon as both the radiating element and the matching device to the 50 ohm coax from the CB rig.

How It Works

Simply, this antenna is a folded vertical dipole that is end fed from a matching stub. The SWR of the antenna can be adjusted to 1.2 or less by adjusting the feed point on the matching stub.

No radiation occurs from the quarter wavelength matching stub due to the opposing currents in each side, while the half wavelength dipole radiates due to having currents in each leg that are in phase.

Construction

The antenna is constructed from an 8 metre length of TV ribbon cable with the wire at both ends stripped and soldered together. These joints should be bound with electrical tape to make them weatherproof.

A 80mm cut is made from one conductor in the ribbon starting 5.3 metres down from the top of the radiator. The insulation is stripped from both conductors for about 1cm at a point 2.2 metres from the bottom of the cut.

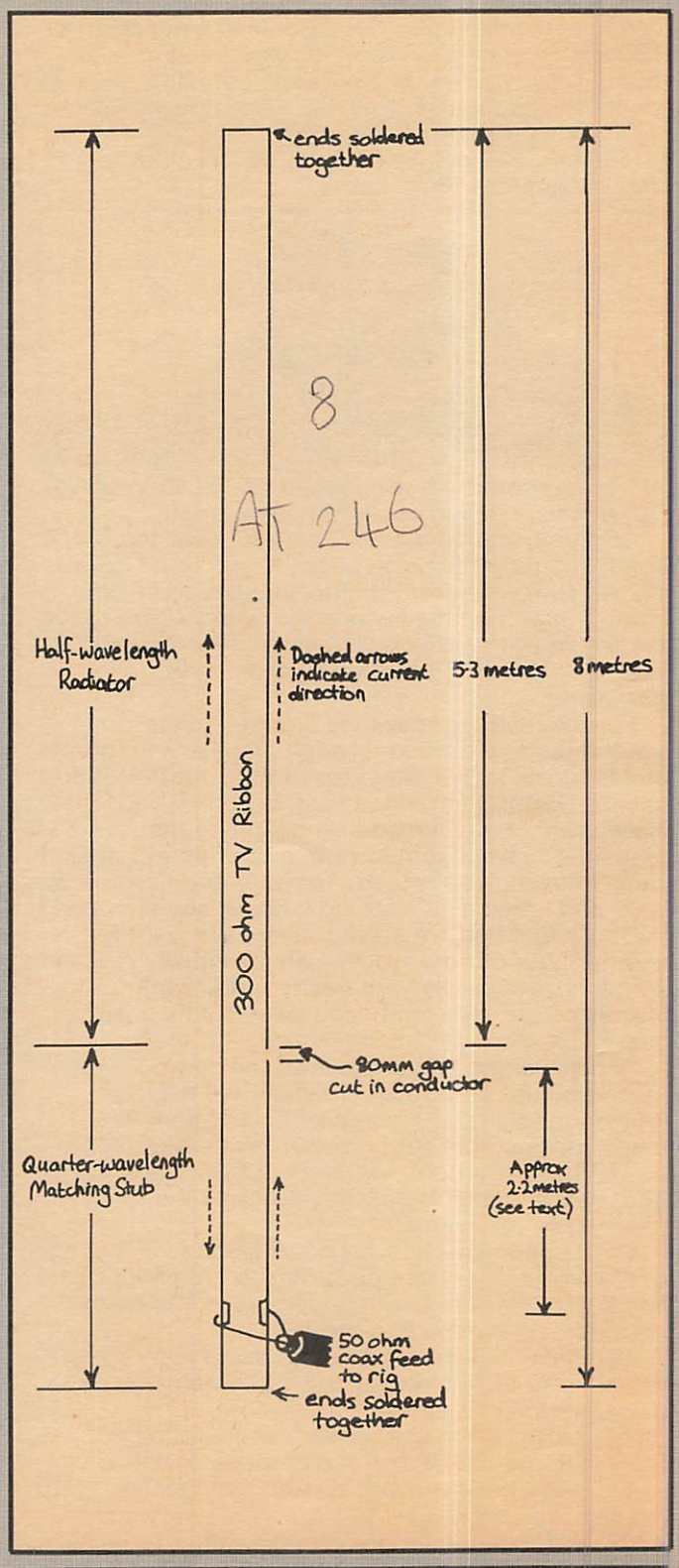
The feedline coax is then soldered on to these stripped sections with the braid connected to the side with the 80mm cut.

Adjustment of the position of the feed connection will vary the SWR. This is easiest done initially with the antenna taped horizontally to the top of the doorways in the corridor inside the house, before finalising arrangements outside. Remember to seal the feed point joints from the weather also.

The antenna is well "hidden" if it is fastened to the side of a chimney, particularly if the chimney has a TV antenna mounted on top — no passerby will ever give it a second glance. Also it will work quite well horizontally — try mounting it under the house eaves.

Mr Edwards states in his covering letter . . . "The antenna works — it's not brilliant, but it's extremely cheap, and does not make your property look like an antenna farm — it's these two points which inspired me to try it."

At $4, it's definitely worth a try — thanks Mr Edwards!



BY ALLAN ROSSER, GOSPEL RADIO 127
ILLUSTRATIONS BY MELVYN ROSSER, MALLEE RADIO 21

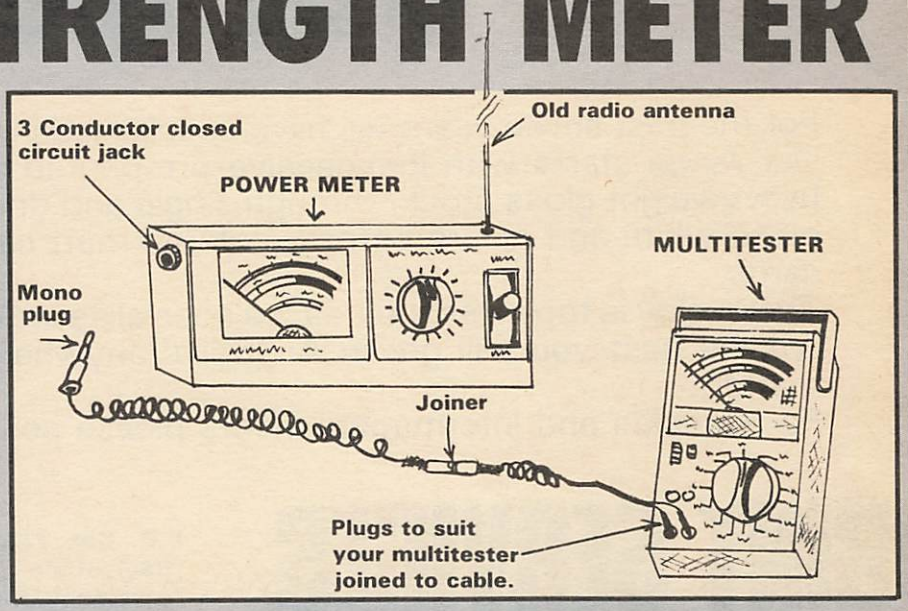
BUILD YOUR OWN FIELD STRENGTH METER

The CBA Project in March 1985 B ACTION prompted me to make ıy own version of it. It was so uccessful that I am sure someone lse will have some use for one, specially as it takes no technical kill — and that was just right for ıe.

This unit consists of two pieces f equipment I already had — in act I didn't have to buy a thing, and either did I end up with more useful'' junk.

Being able to use things for more ıan one purpose justifies their ex-stence a little more.

The first piece of equipment eeded is a multimeter, and the econd is a SWR meter which has a 'Field Strength'' setting, and a hort removable aerial.



CONSTRUCTION

Open the SWR meter and cut he positive wire to the meter. Fit a ormally closed phono jack into the ide of the unit and solder it, as per iagram. With this jack connected ou will still be able to use the me-er as a normal SWR meter, but vhen a plug is inserted, the meter vill be disconnected.

Adapt an old radio aerial so that t will plug into the Field Strength ack. Its length increases signal ickup, but it can be collapsed for djusting signal pickup, and fully ollapsed for easy storage.

Make up a length of microphone able with phono plugs each end. I lready had several leads on hand. Make a lead with a phono socket n one end, and on the other end, connectors to suit your multimeter. This lead you'll also find useful for IB testing.

OPERATION

Place the Field Strength meter in a position where it picks up signal. f you want reasonably accurate comparative readings, fully extend he aerial and set the FS meter on 'full''. Plug in the aerial, connect he lead to the SWR meter and multi-meter and you are ready for action. We ran 30 feet of cable from the roof, back inside to a point beside the CB.

The choice is yours as to whether you use DC volts or milliamps, but you don't have to run outside to adjust controls, because if too much signal is coming through you can use a higher setting on the multi-tester.

There are three ways of adjusting this remote Field Strength meter. Adjusting the range of the milliamp meter is the most accurate, and collapsing the aerial a section at a time is good, and, you can adjust the SWR meter control.

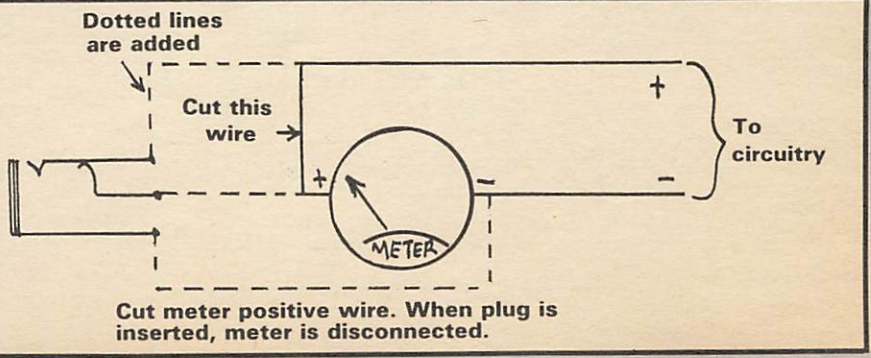
Just remember to record the settings and you will be able to make comparative readings. Next time you will be able to set it up exactly the same.

ADVANTAGES AND DISADVANTAGES

One thing to watch out for — the coaxial may pick up signal, so that would need to be taken into account by always placing the cable in exactly the same place, running it along a particular wall etc., or by eliminating this interference altogether, possibly by the use of a braid breaker or something similar.

However, with this disadvantage, it still beats running outside to try and get a reading, especially as invariably one approaches a normal FS meter it gets embarrassed, and goes funny!

The only advantage not already described, was for me a bonus. My Tandy SWR meter works equally well for 27 megs and 477 UHF.



Cut meter positive wire. When plug is inserted, meter is disconnected.

NEW RANGE OF COLORED CARDS IS NOW AVAILABLE

NEW-NEW-NEW-NEW

QSL CARDS

For the past seven years we have specialised in printing QSL cards. Our range starts with inexpensive pre-printed two color cards on heavyweight gloss stock, through single and double-sided cards on gloss white and colored stock, colored matt cards and special CB cards.

The quality is top class, but, as we specialise in QSL cards the prices are the best you will get in Australia (anywhere else too for that matter).

For samples and information sheets please send a 75¢ stamp to:

BINT SERVICES

P.O. Box 323, Cheltenham, 3192, Victoria. (Reg. office: 38 Granya Grove Mt Eliza 3930 — no enquiries to this address please.).

Classifieds

PURCHASER WANTS popular brand modern CB radio covering 26 MHz, 27 MHz digiscan or similar, AM/SSB. Details to Pike, Box 242 Papakura, New Zealand.

FOR SALE brand new Uniden 40 channel AM CB radio; Panther power supply; 4 foot adjustable tip antenna; magnetic base and co-ax. MUST SELL $145. Ring (02) 337 4491 after 5pm.

FOR SALE Royce 23 channel AM CB. Features PA, ANL, Vol, squelch, tone. Not in working order $40. Mathew Hoggan 37 Darling St. Heywood Vic 3304.

WANTED Owner's manual or schematic diagram for the Claricon Raider. Original or photo copy, send details to Echo Radio 1, Rick, PO Box 519 Claremont WA. 6010.

FOR SALE Saiko 7000 scanner. Excellent condition, with instruction manual and comprehensive Victorian frequency register. Needs antenna $325. Ring (03) 605 4245 business hours.

MEMBERSHIP OPEN to 11 metre operators. $5 per year and receive all extras. Send to 11 Mike 10, PO Box 2330 Singleton NSW 2330.

AUSTRALIAN INTERNATIONAL CB Social Club. New members wanted, must be licensed. For details send SAE for quick reply to Box 150 PO Inala 4077 Qld.

WANTED. Latest USA CB books. Write to Al 01 Bill PO Box 150 Inala 4077 Qld.

ALPHA WHISKEY CB radio life membership club. New members wanted to join. Write to the President 272 Geoff, 49 Wyllie St. Thabeban Bundaber Qld 4760.

SCANNER FREQUENCIES state and federal police, emerg. services, mobile telephones, airports, marine, seaphone, all states $12. Post to the Secretary Box 251 Morwell Vic 3840.

FOR SALE Uniden 144 AM/SSB. Power supply, 12V 8 amp linear AM 120W SSB 240W, stationmaster antenna. Best offer gets the lot. Ring (02) 569 6255 Jim.

WANTED Washington base wiring diagram urgent. Price and particulars to Barry, 12 Button St, Scottsdale Tas 7254. Phone (003) 52 2927.

QSL CARDS printed in three colors with your name, address and callsign cost only $12 per 100 when you join the Lakeside Club. Details free from Lakeside Secretary, 18 Malvina Parade, Gorokan, NSW 2263.

CALLBOOK CLUB, members get free listing in annual callbooks and supplements and 25% discount on the published price of all Club CB publications. Send your licensed Station Identification (Licensed Call letters and number) and 50¢ stamp for membership certificate and club literature. Callbook Club, 18 Malvina Gorokan, NSW 2263.

CODEX INTERNATIONA lists over 1100 QSL Swa Clubs worldwide with confi dential coding of unreliabl clubs. Price $6 from your clu secretary or direct from th Australian distributors: Cal book Club, 18 Malvina, Goro kan, NSW, 2263.

FOR SALE GX 281 Eletro phone marine, complete with 16 ft fibreglass Sportscraft hal cab boat on trailer. Many ex tras — storm covers, bilge pump etc. $6500 ONO Wheeler c/o PO Box 11 Foste 3960.

VHF/UHF YAGI DESIGN Program for Commodor C64/1541 prints out accurat sizes and spacings to you own design requirements Menu-driven and 100% user friendly. Free with blank disk and $3 P&P or $5 on my disk including postage. Rod Few ster, PO Box 29, Kallangu 4503.

New Gear

RECEIVE SIGNALS FROM AROUND THE WORLD

With the addition of a small $99 box your programmable scanner can now listen to signals from the other side of the globe.

GFS Electronic Imports of Mitcham, Victoria recently announced the release of their new Worldscan shortwave and broadcast converter for programmable scanning receivers. They claim that with just the 3 metre wire antenna which is supplied with the Worldscan you can add hours of listening pleasure to your scanner operations.

The Worldscan is smaller than a cigarette packet, runs from its own inbuilt 9 volt battery and simply plugs into the antenna socket of your scanner. GFS say it adds a new dimension to scanning by allowing the host scanner to cover the additional frequency range of 300 KHz to 25 MHz. This means you can now listen to your local AM Broadcast stations plus the hundreds of overseas AM broadcast stations which use the shortwave bands.

The Worldscan was designed to have a high sensitivity for a broadband converter and therefore only requires a small antenna. Stations such as the Voice of America, BBC and many others are generally all strength nine signals using the Worldscan with its 3 metre wire antenna".

The Worldscan's output frequency range is from 120.300 to 145 MHz so that, for example, a 7.5 MHz shortwave signal would be found on 127.5 MHz. Because it outputs on the AM aircraft band it is suited to use on any scanner which covers that band.

The 'Worldscan' manufactured in Australia by GFS, will sell for around $139 plus $8 P&P.

For further information contact GFS Electronic Imports, 17 McKeon Road, Mitcham, Victoria, 3132. Phone (03) 873 3777 or Telex: 38053 GFS.

COAXIAL RELAY SWITCH

A new coaxial relay switch is now available from Imark Pty. Ltd.

The Toyo Tsusho CX-520D Coaxial Relay is a high quality, high specification switch, for use with antenna feedline systems up to frequencies of 2500 MHz. (2.5 GHz).

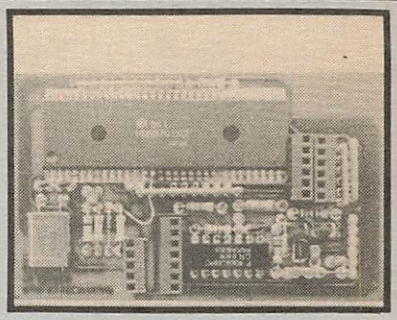
The CX-520D will handle 1K Watt up to 30 MHz and 300 watts up to 1000 MHz. The magnetic switch is operated by low voltage DC (12V nominal) and draws only 160mA at 12VDC.

The CX-520-D features low insertion loss, better than 50dB isolation at 1000 MHz, Low Standing Wave Ratio and has a circuit impedance of 50ohms.

"N" type connectors are used.

Dimensions are only 53mm (W) x 53mm (H) and the weight is approx. 200 grams.

Further details can be obtained from the importers, Imark Pty. Ltd., 167 Roden Street, West Melbourne, Victoria, 3003. Telephone (03) 329 5433. Telex AA37753 "IMARKO" or Perth (09) 364 9010, Brisbane (07) 52 7171 or Sydney (02) 534 4077.



IC-40 SELCALL

The Icom SC-40 selcall unit is the only internal selcall unit available on the Australian market for the UHF CBR service.

Selcall is a system which overcomes the problem of increased usage of UHF CB channels in a number of ways:

(1) No longer is it necessary to listen to the sometimes endless conversations on UHF CB channels.

(2) A radio fitted with the SC-40 remains silent until a call is received from the base or other fleet members radio, an auto acknowledgement beep is sent back to the calling radio.

(3) No more frustrating unanswered calls to a person who is not in attendance, switched off or off channel, only one call is necessary if no acknowledge tone is heard try again later, if a tone is heard by the sending set it means that the receiving radio has acknowledged the call and will continue to beep (page) until it is answered.

GENERAL INFORMATION

- ★ Low power consumption (in most cases it increases battery life)
- ★ Easy installation
- ★ Internal fitting
- ★ 100.000 possible codes
- ★ Operation in both simplex & duplex modes
- ★ Compatible with all current 5 tone selcall systems
- ★ SC-40 responds to very weak signals and most times a call will get through even though the mobile or portable may be out of speech range, this tells the operator to call once a better location is reached
- ★ Single button operation

MARINE VHF AERIALS

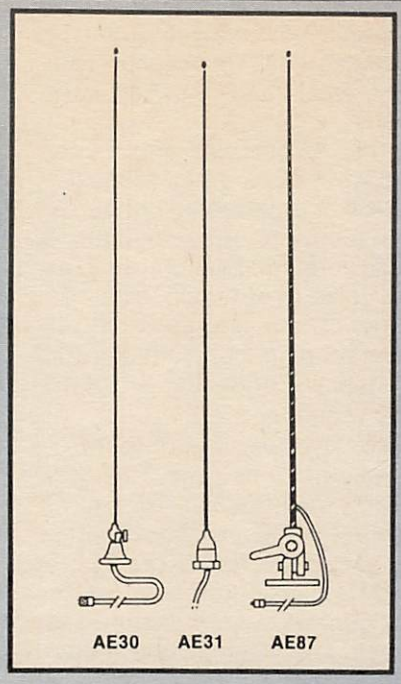
To support the release of their new GX552 VHF Transceiver, Greenwich Marine Electronics Pty Ltd market the comprehensive range of Kingray Marine VHF Aerials.

The "AE30" is a hi-gain, deck mounted VHF aerial, ideal for half-cabs and small cruisers. This aerial is finished in white PVC, stands 3 feet high, pre-tuned, and is suitable for wooden, fibreglas, steel or aluminium boats. It features fold-down swivel base and slope adjusting rubbers.

The "AE31" hi-gain is a mast mounted VHF wire antenna for use on yachts. It provides minimum wind resistance and maximum power, and comes complete with mounting brackets. The bracket is designed to be mounted on top of the mast or, if the area is too cluttered, the bracket may be bent at right angles and fitted to the mast. The bracket has been pre-drilled to allow for easy fixing.

The aerial itself is supplied with two plugs; one for soldering to the cable prior to climbing the mast. The plug fits into a socket in a waterproof housing under the base of the aerial, and the trailing end with NO joins in it can be fed or dropped to its required position. The second plug is then attached to the cable and plugged straight into the set and your radio is ready to go! For cable run of over 20 feet they recommend RG2134 Low Loss Cable.

The "AE87" VHF aerial is designed for the larger cruiser, to match the existing 27 MHz aerial and get the transmitting part of the aerial above the bimini top for maximum performance. This aerial is designed with a double knuckle multi-angle base allowing the aerial to be raked. The main advantages of this 8 foot aerial for cruiser type installation is the ability to transmit and receive with a minimum of interference.



GME Kingray aerials are easy to mount and most are supplied with coaxial cable and plugs already fitted. No soldering is required and extension leads are available to suit every installation.

Contact your nearest Electrophone stockist for details.

GME ELECTROPHONE GX552 VHF MARINE TRANSCEIVER

Greenwich Marine Electronics Pty Ltd have released the GME Electrophone GX552 Synthesised 55 Channel VHF Marine Transceiver operating in the frequency range of 156 MHz to 163 MHz. In addition to the 55 International Channels, the GX552 features the Australian Yacht Racing Channel 87A and includes the Australian Seaphone Channels.

Emergency Channel 16 activates instantly when the Ch-16 priority button is depressed with the Transceiver in the Receive mode. A second press restores the previous channel selected. A dual watch facility allows simultaneous scanning of Channel 16 emergency channel and your selected channel.

The selected channel and status annunciation is provided via a bright digital display readout. High-low power switch selects 25 watts transmit power for long range communication, and one watt for short distance or in-harbour use.

The front mounted speaker delivers clean, crisp audio and permits flush bulkhead mounting without the need for an additional remote speaker. To further enhance the GX552 flexibility of installation, the front panel is easily reversible to provide for both deck-mount and overhead installation.

Additional features offered by the GX552 are front mounted microphone, squelch control for efficient elimination of annoying background noise, electronic up-down channel change and rear extension speaker socket.

The GX552 is colour matched to the complete range of GME Electrophone marine electronics, and packaged in a high impact plastic water resistant case.

Contact your Electrophone stockist for further details.

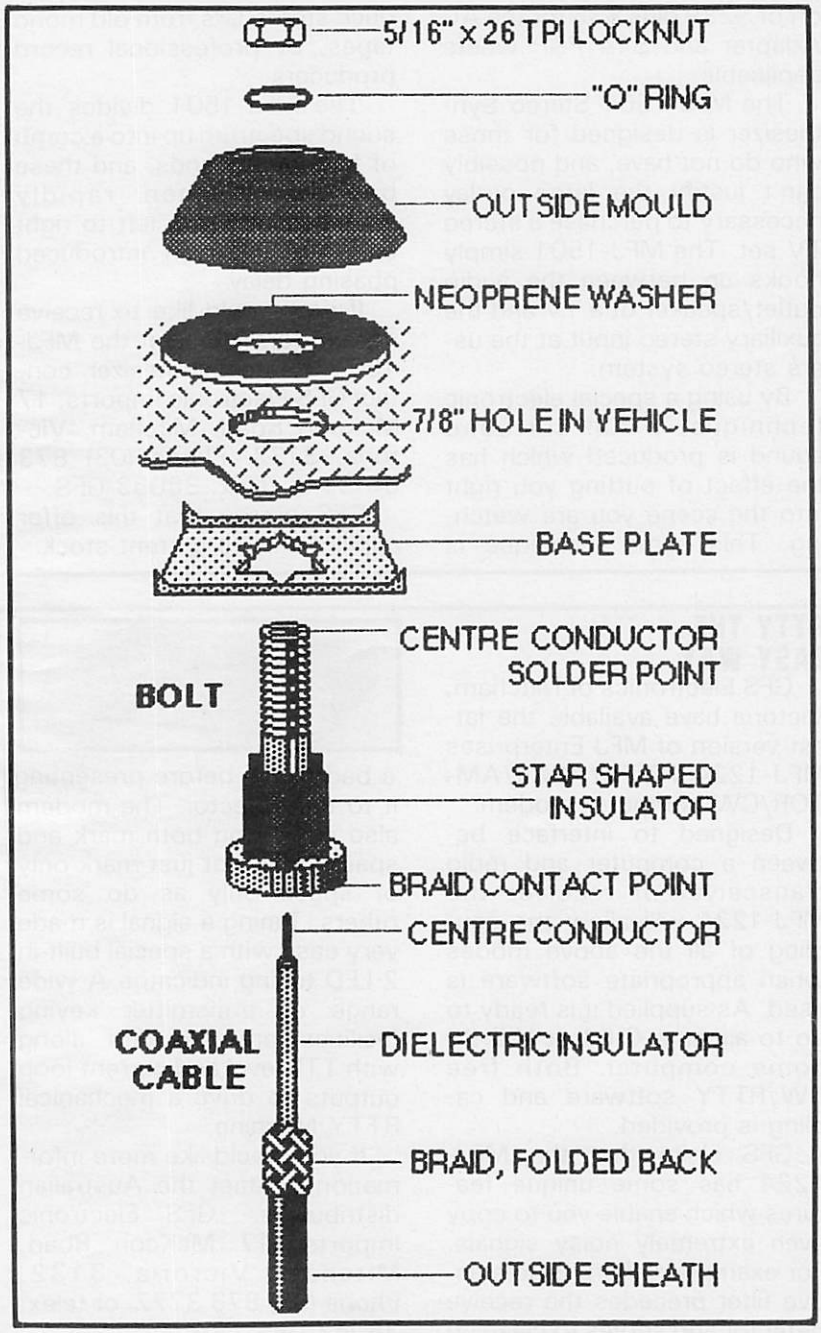
NEW UHF ANTENNA BASE

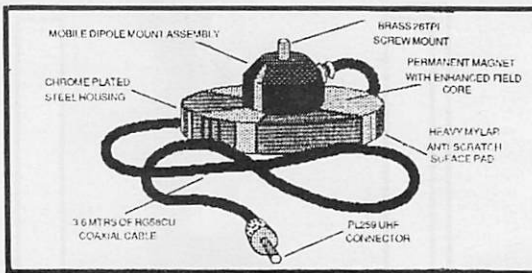
Mobile One has released a new UHF antenna base, designed to meet the exacting requirements of UHF technology.

The Mobile One "UL" base is designed to take UHF whips, with the Australian Standard 5/16x26TPI female screw thread.

Ordinarily, UHF bases are difficult to terminate, and cumbersome to install, however the UL's patented design overcomes any difficulty in this regard without sacrificing the essential qualities in strength and weather resistance.

Contact Mobile One in Sydney, or your nearest Mobile One stockist for further details.




MOBILE DIPOLE MOUNT ASSEMBLY
BRASS 26TPI SCREW MOUNT
PERMANENT MAGNET WITH ENHANCED FIELD CORE
CHROME PLATED STEEL HOUSING
HEAVY MYLAR ANTI SCRATCH SURFACE PAD
3.6 MTRS OF RG58CU COAXIAL CABLE
PL259 UHF CONNECTOR

NEW MAGNETIC MOUNT FROM MOBILE ONE

Mobile One has announced the release of a new magnetic mount assembly.

The Mag 12C magnetic mount assembly has been manufactured in Australia to meet the varying needs of the mobile user, who requires an easily removable antenna mount for portable applications.

For some time, it has been noted that a need existed for a good magnetic base mount that grips the car at high speeds and will also take a wide range of antenna types.

The permanent magnet's enhanced field core allows the magnetic base mount to be used at speeds of 100kph+ with a 60" (1.5mtr) whip.

Most Australian standard 5/16" x 26TPI female screw thread whips (to a maximum weight of 200 grams) can be used with the Mag 12C.

All terminations are encapsulated in the glass impregnated nylon moulding of the new "mobile dipole mount" base assembly, giving maximum mechanical strength and total weather protection for all electrical connections.

Another feature of this unique mount is the anti-scratch protection pad, made from mylar fibres. It is tough and long lasting, yet will not scratch or damage the paintwork of your vehicle.

For further details contact Mobile One in Sydney, or your nearest Mobile One stockist.

New Gear

NEW TEFLOCK CONNECTOR

"Teflock" PL259 connectors, marketed by Captain Communications of Parramatta, fills the need for a high quality UHF and HF connector for RG58 cable. Unlike older designs, the Teflock can be secured in seconds without soldering, and without any risk of shorting. The centre conductor can be crimped or soldered, enabling quick, easy fitting away from the workshop. The braid and outer sheath are held to the connector by the shield lock. David Gill of Captain challenges anyone to part connector from cable!

For the novice, or anyone who is not expert at making up cables, the Teflock is a connector worth looking at. Its high temperature Teflon insulator will not surrender, even when attacked by monster soldering irons!

Being Australian designed and manufactured, the Teflock is not only better, but is actually cheaper than imported PL259 plugs. Another saving — the Teflock is easily re-useable, unlike imported PL259s, which virtually always have to be chucked out when they inevitably short.

For further information and pricing call: David Gill, Captain Communications, 28 Parkes Street, Parramatta, phone (02) 633 4333.

VIDEO SOUND STEREO SYNTHESIZER

GFS Electronic Imports, distributors for MFJ Enterprises of Mississippi are offering a special price on all of their MFJ-1501 Stereo Synthesizers sold during November and December. Normally $399 plus $35 for an AC Adapter GFS are offering the units for 40 percent off or $239 plus $35 for the AC Adapter and $14 P&P where applicable.

The MFJ-1501 Stereo Synthesizer is designed for those who do not have, and possibly can't justify the large outlay necessary to purchase a stereo TV set. The MFJ-1501 simply hooks up between the audio outlet/speaker of a TV and the auxiliary stereo input at the users stereo system.

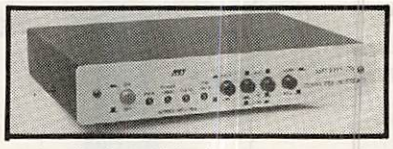
By using a special electronic technique, a full surround sound is produced which has the effect of putting you right into the scene you are watching. This same technique is used by TV stations to synthesize a stereo signal when non-stereo sound track films are shown. It is also used to produce stereo LPs from old mono tapes, by professional record producers.

The MFJ-1501 divides the sound spectrum up into a comb of frequency bands, and these bands are then rapidly switched from the left to right channels, with an introduced phasing delay.

If you would like to receive more information on the MFJ-1501 Stereo Synthesizer, contact GFS Electronic Imports, 17 McKeon Road, Mitcham, Victoria, 3132. Phone (03) 873 3777, or telex: 38053 GFS.

GFS advise that this offer applies only to current stock.

RTTY THE EASY WAY



GFS Electronics of Mitcham, Victoria have available the latest version of MFJ Enterprises MFJ-1224 RTTY/ASCII/AMTOR/CW computer modem.

Designed to interface between a computer and radio transceiver or receiver the MFJ-1224 will allow the coupling of all the above modes when appropriate software is used. As supplied it is ready to go to air on a C-64 or VIC-20 home computer. Both free CW/RTTY software and cabling is provided.

GFS claim that the MFJ-1224 has some unique features which enable you to copy even extremely noisy signals. For example a sharp 8 pole active filter precedes the receive detector and serves to clean up a bad signal before presenting it to the detector. The modem also copies on both mark and space tone, not just mark only or space only as do some others. Tuning a signal is made very easy with a special built-in 2 LED tuning indicator. A wide range of transmitter keying facilities are provided along with TTL level and current loop outputs to drive a mechanical RTTY Machine.

If you would like more information contact the Australian distributors:- GFS Electronic Imports, 17 McKeon Road, Mitcham, Victoria, 3132. Phone (03) 873 3777, or telex: 38053 GFS.

CLUB REGISTER FORM

If you wish to have your club name listed in the CB ACTION Club Register, please ask your club secretary to fill in this coupon and post to "CB ACTION CLUB REGISTER, Box 628E GPO, Melbourne, Victoria, 3001."

Due to printing deadlines, it is possible for new entries to take up to two issues before appearing.

If you don't want to cut your copy of CB ACTION magazine, either photostat the coupon or send your entry in on a separate letter giving all the relevant details.

Overseas entries are welcome.

Please print or type — applications that are either illegible or not completely filled out may not be included in the listing.

Authorised by .....Pres /Sec.

CB Action Club Register

FULL CLUB NAME .....

.....

ADDRESS .....

.....

P/CODE ..... STATE .....

advertise free

Readers of CB ACTION QUARTERLY may use the classified columns to the extend of 25 words without charge. Each additional word will cost five cents. Address and telephone numbers are counted as wordage. Two insertions from the one person in one issue will be costed as one advertisement.

Advertisements from commercial establishments will not be acepted except as display advertising. Prices and details can be obtained on application to The Advertising Manager CB ACTION QUARTERLY, Box 628E GPO Melbourne Victoria 3001.

Photographs may be submitted to accompany advertisements without charge and will be published provided space is available. Firm requests for the insertion of photos must be accompanied by an additional $2 fee. Every attempt will be made to ensure that the advertisements will be included in the next issue of the magazine. Priority will be given on a first come first served basis dependant on the space available. The publishers reserve the right to refuse any advertisement which in the opinion of the Editor does not comply with the Victorian Consumer Affairs Act (1972) or is not legible.

Post the coupon to: CB ACTION CLASSIFIEDS, BOX 628E GPO MELBOURNE 3001.

NOTE: READERS USING THIS SERVICE SHOULD BE AWARE THAT POST OFFICE BOXES CANNOT BE USED WITHOUT INCLUDING THE FULL NAME AND ADDRESS OF THE PERSON RENTING THE BOX. THESE DETAILS MUST APPEAR IN THE BODY OF THE ADVERTISEMENT. HOWEVER, ADVERTISING YOUR ADDRESS AS c/o (NAME OF TOWN) POST OFFICE IS ACCEPTABLE.

ADVERTISEMENTS WILL NOT BE ACCEPTED UNLESS THE FULL NAME AND RESIDENTIAL ADDRESS OF THE ADVERTISER APPEARS ON THE BOTTOM OF THE COUPON. THIS INFORMATION WILL NOT BE PUBLISHED.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

Name.....

Address.....

CB Action Club Register

NSW

Amateur and Citizens Radio Club, 2 Griffith Ave, Roseville NSW 2069.
Argonauts Radio Contact Club, C/- PO Railway Town NSW 2880.
Barrenjoey Peninsula Area CB Radio Club, PO Box 25, Avalon NSW 2107.
Beef Country Radio & Recreation Club, PO Box 852, Casino NSW 2470.
Berowra CB Radio Club, PO Box 2, Berowra NSW 2081.
Black Ace CB club & CB Callbook Club of Licensed Operatores, 18 Malvina Pde, Gorokan NSW 2263.
Black Stump Radio Club PO Box 179, Coonabarabran NSW 2357.
Blue Mountains Repeater Association, PO Box 358, Granville NSW 2142.
Bravo Victor Radio Club C/- 11 Canning St Bega NSW 2550.
CB Callbook Club of Licensed Operators, 18 Malvina Parade, Gorokan, NSW 2263.
Central Western Citizens Band Community Radio Club, PO Box 628 Orange NSW 2800.
Disabled Water Sports Charity No 2023, C/- PO Saratoga NSW 2250.
Eleven Mike, PO Box 357, Singleton NSW 2330.
G.L.C. Eastern Bases CB Radio Club, PO Box 767, Gosford NSW 225-.
Gosford Citizens Radio Club, PO Box 447, Gosford NSW 2250.
Greater Cessnock City Radio Association, 48 Mayfield St, Cessnock NSW 2325.
Leisure Coast CB Radio Club, PO Box 1127, Wollongong, NSW 2500.
MacLeay Valley CB Radio Club PO Box 34, Kempsey NSW 2440.
Mallee Radio Australia CB Radio Club, PO Box 920, Griffith NAW 2680.
Metropolitan Radio Club, PO Box C31 Clarence St. Sydney NSW 2000.
Metropolitan West Radio Club, 74 Van Diemen Ave, Willmot NSW 2770.
Mike India CB Radio Club, PO Box 778, Campbelltown NSW 2560.
Moonlighters District Radio Club, PO Box 13, Hawks Nest NSW 2324.
National Dingo Association C/- Smithville via Broken Hill NSW 2880.
Native Dog Hill CB Club, PO Box 50, Warril NSW 2528.
November Alpha Club, PO Box 412, Narrandera NSW 2700.
Overland Radio Club Inc (Sydney Branch), PO Box 295, Dee Why Sydney NSW 2099.
Pathfinder CB Social Club of Aust. Queanbeyan/Canberra Div PO Box 771, Queanbeyan NSW 2620.
Pathfinder Radio Group NSW, PO Box 167, St Mary's NSW 2750.
Pioneer CB Radio and Social club, PO Box 34, Boolaroo NSW 2284.
Radio Rescue (NSW) Galong NSW 2585.
REACT NSW State Team, 716 Peel St, Albury NSW 2640.
Riverina Radio CB Social Club, 29 Parkinson Cres, Griffith NSW 2680.
Rough As Guts Radio (RAG), Finns Rd, Kulnura, RMB 22442, NSW 2250
Shallow Water Sierra Whisky Club, PO Box 857, Nowra NSW 2540.
Skydiver CB Radio Club, Sydney Radio Group, PO Box 184 Northbridge, Sydney, NSW 2166
Tango Romeo Echo CB Club, PO BOx 688, Taree NSW 2430.
Tango-X-ray Side-band Radio Club of Australia, PO Box 664, Castle Hill NSW 2154.
The Beam Club of Australia, PO Box 633, Brookvale NSW 2100.
The TT UHF CB Radio Club, c/o PO Box C31 Clarence St. Sydney NSW 2000.
Titan Radio Group, PO Box 195 Blacktown NSW 2148.
Viking CB Radio Club PO Box 133 Miller NSW 2168.
Western Radio club, PO Box 88, Enfield NSW 2136.
Whisky Lima Radio Club PO Bpx 139 Revesby NSW 2212.
Williams Valley Radio Club PO BOx 50 Dungong NSW 2420.
Wombat CB Radio Club, PO Box 348, Lavington NSW 2641.

WA

ACREM WA, South West Division, 68 Rogers Avenue, Katanning WA 6317.
Alpha Whiskey Alpha Radio Club 180 Bay View Dve Little Grove Albany WA 6330.
Alpha Whiskey Alpha Club, PO Box 997, Albany WA 7330.
Aust Radio Group, PO Box 429, Merredin WA 6415.
Black Swans CQDX Club of WA, PO Box 220, Kwinana WA 6167.
Bunbury Radio Club Inc, PO Box 31, Bunbury WA 6230.
Canning River Radio Club, 53 Parkside Ave, Mt Pleasant WA 6153.
Carnarvon Radio Club, PO Box 294, Carnarvon WA 6701.
CREST WA (Inc) PO Box 1200, East Victoria Park WA 6101.
Echo Radio CB Club, PO Box 519, Claremont, WA 6010.
Freedom Group Perth, PO Box 9, Palmyra WA 6157.
Gascoyne CB Club PO Box 947 Carnarvon WA 6701.
Golden Hawk CB Radio Club of Australia, PO Box 1183, Bunbury WA 6230.
Perth Acrem and Mustang CB Social Club, PO Box 193, Greenwood WA 6024.
Pilbara Radio Group, PO Box 95, Parraburdoo WA 6754.
Port Hedland Whisky Alpha CB Club, PO Box 2142, South Hedland WA 6722.
REACT WA State Team, 11 Coates St, Hamilton Hill WA 6163.
Sandgroper Club of South West WA PO Box 249 Collie WA 6225.
Southern River Radio Group PO Box 38 Kelmscott WA 6111
The Mango Club, PO Box 241, Hillarys WA 6025.
The UHF Assn of WA Inc, PO Box 176, Hillarys WA 6025.
Titan Radio Group, PO Box 210, Kwinana WA 6167.
Wanneroo Citizens Radio Emergency Services Teams WA Inc, PO Box 402, Wanneroo WA 6065.
Western Radio Club, PO Box 484, Collie WA 6225.
Wild Geese International Combat Veterans Radio Communications Group, PO Box 673, Cannington WA 6107

QLD

ACRIM QLD Inc, PO Box 213, Everton Park Brisbane Qld 4053.
Alpha Whiskey, PO Box 936, Bundaberg, Qld 4670.
Alpha Whiskey Club, 49 Whylie St. Thabeban Bundaberg Qld 4670.
Australian Bulldog Club, 37 Sunderland St, Garbutt Townsville Qld 4814.
Australian International CB Social Club, PO Box 150, Inala Qld 4077.
Brisbane Volunteer Emergency Monitoring Service, 22 Reks St, Buranda Qld 4012.
Bunya Radio Club, PO Box 575, Kingaroy Qld 4610.
Color Postcard Express International QSL and Postcard Swap Club (Australian Rep), PO Box 111, Oakey Qld 4401.
Dirty Water CB Club of Australia, PO Box 262, Morningside Qld 4170.
Golden City CB Club, PO Box 557, Gympie Qld 4570.
Hervey Bay and District CB Club, PO Box 382, Pialba Qld 4655.
Inlanders CB Radio Club of Australia, PO Box 5712, Rockhampton Mail Centre Qld 4702.
KKK 106 Radio Club, PO Box 6547, Goldcoast Mail Centre Qld 4217.
Leichardt CB Radio Club, PO Box 941, Leichardt Qld 4825.
Premiere Radio Social Club, PO Box 631, Sunnybank Qld 4109.
Radio Rescue (Qld), PMB Reid River, Nth Qld 4816.
REACT QLD State Team, Box 5227, Cairns Mail Centre Nth Qld 4871.

CB Action Club Register

unshine Coast CB Radio Club, PO Box 379, Maroochydore, Qld 558.
outhern Cross Radio Club Inc., PO Box 529, Darra, Qld 4076.
oowoomba District CB Club, PO Box 5387, Toowoomba Qld 350.
oowoomba Mountain CB Club, PO Box 5299, Toowoomba Qld 350
ltra Lite Radio Club Brisbane, C/- PO Box 13, Cairns Qld 4152.
um City CB Club PO Box 229 Qld 4670
nicorn Radio of Australia PO.Box 787 Woodridge Qld 4114.
odiac International DX Radio of australia, PO Box 189, Albion, ld 4010.
ulu Alpha Foxtrot CB Radio Club, PO Box 5122, Rockhampton ail Centre Qld 4701.

SA

ustralian Citizen Radio Monitors SA Inc (ACRM), PO Box 83, rospect SA 5082.
ustralian Independent Monitoring Service Inc, SA Division, PO ox 86, Stepney SA 5069.
harlie X-Ray Citizen's Band Radio Club Inc., PO Box 824, Salisury SA 5108.
hristie's Beach Citizens Band Radio Club, PO Box 22, Moana SA 169.
oonawarra CB Radio Club, 2 Eyre St, Barmera SA 5345.
agle Radio Group, PO Box 302, Morphett Vale SA 5162.
Hate Washing Dishes, PO Box 210, McLaren Vale SA 5171.
inear Radio Club, PO Box 70, Elizabeth Fields, SA 5113.
EACT Marine Rescue Service, 1 Flavel Terrace, Murray Bridge, A 5253.
EACT SA State Team (Inc), 1 Flavel Tce, Murray Bridge SA 253.
corpion CB Radio Club, PO Box 312, Elizabeth SA 5112.
outhside CB Radio Club, PO Box 95, Glenelg SA 5045.
outh West Radio and Social Club Inc, Box 381, Morphett Vale A 5162.
trangers CB Social Club, PO Box 79, Ingle Farm SA 5098.
rans-World CB Radio Club International, 90 Crozier Ave, Daw ark SA 5041.
ulu Whiskey QSL Club, PO Box 16, Smithfield, SA 5114.

VIC

ustralian Citizens Radio Monitors Gippsland PO Box 251 Morvell Vic 3840.
ustralian Radio Social Club, PO Box 222, Seaford Vic 3198.
ell Bird Club of Vic, C/- PO Box 39, St Andrews Vic ;3761.
endigo Radio CB and Social Club Inc. PO Box 862, Bendigo, Vic. 550.
ravo Mike Radio Club, PO Box 94, Melton Vic 3337.
ravo Sierra Bravo Radio Club (BSB), PO Box 277, Bendigo Vic 550.
arrajung UHF CB Repeater Assn, PO Box 55, Port Albert Vic 971.
B Spoon Collectors Club, PO Box 251, Morwell Vic 3840.
ureka Base CB Radio Club PO Box 251 Morwell Vic 3840.
osters CB Radio Club, PO Box 229, Cranbourne Vic 3977.
ippsland Emergency Monitoring Service (Inc) PO Box 983 Morvell Vic 3840.
ippsland Repeater Assocn, PO Box 77, Sale Vic 3850.
rampians BC Club, C/- J. Delley, 1 Johnston St, Stawell Vic 380.
orsham CB Club, PO Box 730, Horsham Vic 3400.
nternational Crusade Assocn, PO Box 2616W, GPO Melbourne ic 3001.
lack Daniels Whisky Club PO Box 278 Preston Vic 3072.
ilowatt Radio Club of Australia, PO Box 428, Mt Eliza Vic 3930.
lary Delta 27 MHz Radio Club, 31 Rosebud Pde, Rosebud Vic 939.
like India CB Radio Club, PO Box 1499, Mildura Vic 3500.
Nightowl Radio Club of Victoria, PO Box 97, Huntingdale Vic 3166.
Omega Radio Club of Victoria, PO Box 50, Chadstone Centre Vic 3148.
Radio Charity Group, Latrobe Valley, PO Box 237, Chruchill Vic 3842.
Radio Emergency Associated Citizens Team, 113 Blair St, Portland Vic 3303.
Radio Emergency Assoc, Citizens Teams Australia, PO Box 114 Corio Vic 3214.
Radio Enthusiasts Club of the Blind, PO Box 219, Glenroy Vic 3046.
Radio Rescue (Vic Branch), 35 Haywood St, Morwell Vic 3840.
REACT VIC State Team, 5 Damian Crt, Wodonga Vic 3690.
Region Dandenong CB Radio and Social Club, PO Box 57, Doveton Vic 31277.
Riviera Radio Club of Australia, C/- P. Robertson, 19 Taylor St, Bairnsdale Vic 3875.
Royal Volunteer Coastal Patrol, PO Box 182 Brighton Vic 3186.
Ethnic Ether (Double EE) Assocn, 31 Bride St Hampton Park Vic. 3976.
Scramblers CB Radio Club of Vic. PO Box 103, Braybrook, Vic. 3019.
thern Cross Radio Group, PO Box 365, Leongatha Vic 3953.
Sovereign Radio Club, PO Box 21, Sebastapol, Ballarat Vic 3356.
Tango Victor Radio Club, PO Box 3, Timboon Vic 3268.
The Black Panther DXing Social Club PO Box 527 Bendigo Vic 3550.
Ultra-Hi Club, 8 Peter St, Bell Post Hill Vic 3215.
Victorian Scorpion Radio Club (South Gippsland), 39 Quigley St, Morwell Vic 3840.
Victoria UHF Radio Club Inc, PO Box 407 Mount Waverley Vic 3149.
28 Whiskey Group Social Club Base of vic C/- Bob, 33 Kennedy St Longwarry Vic 3816.

TAS

Blue Lagoon Social Radio Club, 9 Walker St. Ulverstone Tas. 7315.
FIB UHF Club, PO Box 18, Ridgley Tas 7321.
REACT Tasmania State Team, RMB 7055, National Park, Tas. 7140.
Sierra Tango Radio Club, PO Box 433, New Norfolk Tas 7140.
United Frequency Operators of Tasmania, 7 Jacob Ave, Georgetown Tas 7253.

NORTHERN TERRITORY

Australian Citizen Radio Monitors, NT branch Inc, PO Box 40327, Casuarina NT 5792.
Darwin CB Radio Club, PO Box 40733, Casaurina, NT 5792.

INTERNATIONAL

Dayglo QSL Club, 13 Synite Place, Rostrevor, BT34-3EP, Co Down, Northern Ireland, UK.
Ethnic Ether (Double EE) Assocn, 31 Bride St Hampton Park Vic 3976
Gumboot QSL Club, PO Box 4127, New Plymouth 4630 New Zealand.
Lakeside QSL Club of Australia, 18 Malvina Pde, Gorokan NSW 2263.
REACT Australia Headquarters, 1 Flavel Tce, Murray Bridge SA 5253.
REACT International Inc, 3653 Woodhead Dve, Northbrook, Illinois USA 60062.
Three Vikings QSL Club, PO Box 34, 642 21 Katrineholm Sweden.
Wainui Radio Club, PO Box 836, Wellington NZ.

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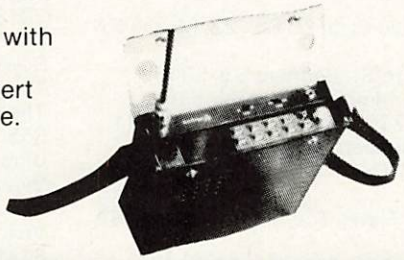

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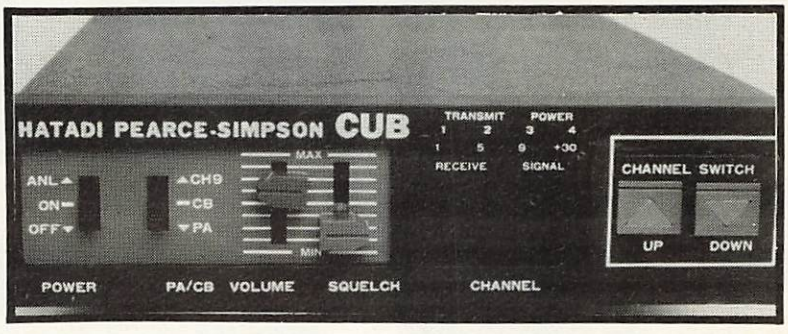

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